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WAGE TRENDS IN PROSPERITY AND DEPRESSION PRIOR TO NRA

By
J. M. Hunter

(A Section of Part C: Control of Wages)

WORK MATERIALS NO. 45
THE LABOR PROGRAM UNDER THE NIRA

no.6

Work Materials No. 45 falls into the following parts:

Part A: Introduction
Part B: Control of Hours and Reemployment
Part C: Control of Wages
Part D: Control of Other Conditions of Employment
Part E: Section 7 (a) of the Recovery Act

LABOR STUDIES SECTION
March, 1936

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F O R E W O R D

The "Study of Wage Trends in Prosperity and Depression Prior to NRA" was prepared by Mr. J. H. Hunter of the Labor Studies Section, Mr. Solomon Barkin in charge. It is a critical summary based on secondary rather than primary sources and is intended to serve as a background to the extensive and detailed presentation of conditions under the NRA in Work Materials No. Nine, "Wages and Hours in American Industry".

Data for the period 1909-1928 are comparable only in limited respects with those available for the period 1929-1933 so that Chapters I and II are essentially independent studies. In Appendix II much of the available material necessary for a detailed examination of conditions existing prior to the NRA are presented for the purpose of furnishing a comprehensive index of conditions as revealed from published sources.

At the back of this report will be found a brief statement of the studies undertaken by the Division of Review.

L. C. Marshall
Director, Division of Review

March 25, 1936

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CHAPTER I

WAGE MOVEMENTS - 1909 to 1928

In order to estimate the effects of code wage provisions and evaluate the wage trends of the code periods, it is necessary first to draw as clear a picture as possible of prior wage movements, both during the depression years of 1929, 1930, 1931, 1932 and 1933, and during the period of expansion from 1909 to 1928. It is with the earlier period that this chapter is concerned.

The picture for this period will be drawn by tracing the movements of average hourly earnings, average full-time weekly earnings, and average annual earnings. These figures of money earnings will then be corrected for changes in the cost of living, in order to show changes in the real income of labor and in labor's purchasing power.

The principal sources of the data on average money earnings to be presented are "Real Wages in the United States, 1890-1926" by Paul H. Douglas, (*) and "The Movement of Money and Real Earnings in the United States, 1926-28", by Paul H. Douglas and Florence T. Jennison. The cost of living index figures used for the year preceding 1913 are those of Douglas, and, for subsequent years, those of the Bureau of Labor Statistics, revised as of September, 1933.

TABLE I

AVERAGE HOURLY EARNINGS (a)
OF EMPLOYED WAGE-EARNERS IN ALL INDUSTRY (b)
1909 - 1928

YEAR	Average Hourly Earnings (in dollars)	Relative Earnings (1914=100	YEAR	Average Hourly Earnings (in dollars)	Relative Earnings (1914=100
1909	.282	89	1919	.558	177
1910	.288	91	1920	.688	218
1911	.293	93	1921	.640	203
1912	.302	96	1922	.608	192
1913	.313	99	1923	.662	209
1914	.316	100	1924	.683	216
1915	.319	101	1925	.696	220
1916	.348	110	1926	.685(c)(d)	219(e)
1917	.394	125	1927	.703(d)	225(e)
1918	.482	153	1928	.710(d)	227(e)

(*) Douglas' computations are believed to be based upon more comprehensive data than are any others available.

(a) As computed for the years 1909 to 1925, inclusive, by Paul H. Douglas ("Real Wages in the United States, 1890-1926" - page 205), and, for the years 1926, 1927, and 1928, by Paul H. Douglas and Florence T. Jennison ("The Movement of Money and Real Earnings in the United States, 1926-28" page 56).

(b) The term "wage earners in all industry" as used here, includes: (1) employees in the following manufacturing industries: slaughtering and meat-packing; woolen; cotton; hosiery and knit goods; men's clothing; iron and steel; lumber and timber products (sawmills and planing mills); boots and shoes; book and job printing; newspaper printing; granite and stone; baking; metal trades; (2) employees in the building trades; (3) employees in the anthracite and bituminous coal mining industries; (4) unskilled labor in general; and (5) federal government employees (in executive departments in Washington, D. C., and postal workers).

(c) The average hourly earnings for this year were originally given by Douglas as $.712 ("Real Wages in the United States, 1890-1926", page 205). The difference between this figure and the revision is explained by Douglas and Jennison as arising from the fact that the latter was obtained by interpolation from the 1927 Census data, whereas the former was constructed by extrapolation from data collected prior to 1925 ("Movement of Money and Real Earnings in the United States, 1926-28", page 1, footnote).

(d) Despite the specific statement in the preface to the article by Douglas and Jennison that "the figures presented here are comparable to those in Paul H. Douglas' book "Real Wages in the United States, 1890-1926", there appears to be some possiblity that this figure is not strictly comparable with the estimates of earnings given for the years 1909 to 1925. In combining the average hourly earnings per wage-earner in each of the selected industries and classes of labor into composite averages for each of the years from 1909 to 1925, inclusive, given in this Table, Douglas weighted the earnings in each industry and class according to the number of employees in each in 1890, but in computing the average "for all industry" for 1926, 1927, and 1928, the weights were based on 1928 employment. The possibility of error in the series as a whole resulting from this disparity of method is evident.

(e) It will be noted that this index number (which is as given by Douglas and Jennison), surprisingly, is not quite the quotient of the hourly earnings for the same year divided by the hourly earnings for 1914, as given in this Table. It is used none the less for the reason that there is no way of knowing exactly how the hourly earnings for 1914 used in this calculation were not those of the Table, perhaps being computed by use of weights based on 1928 employment (see footnote (d) above).

A word of warning is necessary with regard to the reliability of the statistics presented in this chapter and in all others of this paper. The basic data used, while the most accurate obtainable, are so disconnected and fragmentary, based on such unrepresentative sampl-

ing and inconclusive assumptions and requiring such questionable splicing and interpolation to piece them together, that allowance for error must constantly be made. This is particularly true of cost of living indexes, more especially prior to 1913, and, consequently, of data on real wages and earnings based thereon.

Despite these statistical deficiencies, the conclusions reached are believed to be of definite value as reflecting the changes in the well-being of Labor.

I. AVERAGE EARNINGS PER HOUR

Table 1 shows the average hourly earnings (*) of wage earners in selected manufacturing and non-manufacturing industries as a whole for each year from 1909 to 1928, inclusive. In addition, the index numbers of changes in average hourly earnings, on a 1914 base, are presented.

According to this Table, the average money earnings per hour for wage-earners in a representative sample of all Industry increased from $.282 in 1909 to $.316 in 1914, a gain of 12.4%, and then more than doubled during the World War and the years immediately following, rising from $.316 in 1914 to $.688 in 1920, a gain of 117.7%.

This advance was halted momentarily by the 1921 depression, hourly earnings falling off slightly from the 1920 high to $.608 in 1922, a loss of 11.6%. After 1922, the advance was resumed and continued steadily to 1928, though at a moderate pace. The total gain for this period, from the $.608 figure in 1922 to $.710 in 1928, was 16.7% (**)

Considering the period of expansion as a whole, it is found that average earnings per hour of wage-earners in 1928 were over two and one-half times as great as they were in 1909 - a total gain of 151.8%. (***)

Before accepting these conclusions, the criticisms levelled at them by Leo Wolman (****) should be examined.

Wolman suggests, among other things, that exaggerated weight has been attached by Douglas to union wage rates in the computation of average earnings in manufacturing industries, thus showing such earnings above their true levels and concealing the actual magnitude of their movements.

(*) For the most part the data available are in the form of hourly earnings rather than hourly wage rates.
(**) Attention is called to the use of slightly different methods in computing the 1909-1925 figures and those for 1928 (see footnote (d) to Table I).
(***) See footnote immediately preceding.
(****) See his "American Wages" in the "Quarterly Journal of Economics"", February, 1932.

The validity of this criticism may be tested by comparing the computations of average earnings per hour in all Industries for the year 1921 to 1928 made by Wolman with those of Douglas. These are presented in Table II. So far as levels of average earnings per hour are concerned, Douglas' averages are somewhat higher than Wolman's, but, with respect to the magnitude of the movements of these levels, the difference in the index numbers of change from 1921 to 1928, as estimated by these two authorities, is relatively negligible, only 1.3 points.

II. AVERAGE FULL TIME EARNINGS PER WEEK

Table III gives the average full time earnings per week of wage-earners in selected manufacturing and non-manufacturing industries as a whole (*), for each year from 1909 to 1928, inclusive, and shows in addition, the percentage changes from a 1914 base in index numbers.

TABLE II

COMPARISON OF AVERAGE EARNINGS PER HOUR DATA OF DOUGLAS AND WOLMAN; 1921 - 1928

YEAR	Douglas(a)	Wolman (b)	Douglas %	Wolman
1921	$.640	$.608	100.0	100.0
1922	.608	.582	94.8	95.7
1923	.662	.624	103.4	102.6
1924	.683	.648	106.7	106.6
1925	.696	.652	108.8	107.2
1926	.686	.660	107.2	108.6
1927	.703	.669	109.4	110.0
1928	.710	.682	110.9	112.2

(a) Taken from Table I.

(b) Taken from Leo Wolman's report to the May, 1930 Conference on International Wage Comparisons at Geneva, contained in "International Wage Comparisons," Bulletin No. 22 of the Social Science Research Council, June, 1932, pages 241 - 262.

(*) This sample of all Industry has a broader scope than that used in determining average hourly earnings, since it includes farm labor, seamen, railway employees, public school teachers, and Congregational and Methodist ministers.

These averages are weighted combinations of average hourly earnings in 25 manufacturing industries combined (National Industrial Conference Board: "Wages in the United States"), average hourly earnings in Class I, steam railroads (Computations of National Industrial Conference Board, based on the monthly reports of the Interstate Commerce Commission: "Wage Statistics of Class I Steam Roads in the United States"), average wage rates per hour in 17 building trades in 23 cities (National Industrial Conference Board: "Wages in the United States", based on rates published monthly by "The American Contractor"), and average hourly earnings in bituminous coal mines (United States Department of Labor Bureau of Labor Statistics: "Special Bulletins" and "Monthly Labor Review" - September, 1929).

TABLE III

AVERAGE FULL-TIME WEEKLY EARNINGS (a)
OF EMPLOYED WAGE-EARNERS IN ALL INDUSTRY (b);
1909 - 1928

YEAR	Average Weekly Earnings (In dollars)	Relative Earnings (1914-100)	YEAR	Average Weekly Earnings (In dollars)	Relative Earnings (1914-100)
1909	13.41	90	1919	26.29	176
1910	13.68	92	1920	31.67	212
1911	13.89	93	1921	28.63	192
1912	14.34	96	1922	28.07	188
1913	14.79	99	1923	30.39	204
1914	14.91	100	1924	30.96	208
1915	15.14	102	1925	31.72	213
1916	16.46	110	1926	31.38 (c) (d)	210
1917	18.73	126	1927	32.10 (d)	215
1918	23.13	155	1928	32.45 (d)	218

(a) As computed for the years 1908 to 1925, inclusive, by Paul H. Douglas ("Real Wages in the United States, 1890-1926", page 211), and, for the years 1926, 1927, and 1928, by Paul H. Douglas and Florence T. Jennison, ("The Movement of Money and Real Earnings in the United States, 1926-28," page 44).

(b) The term "wage earners in all industry" as used here, includes: (1) employees in the following manufacturing industries; slaughtering and meat-packing; woolen; cotton; hosiery and knit goods; men's clothing; iron and steel; lumber and timber products (sawmills and planing mills); boots and shoes; book and job printing; newspaper printing; granite and stone; baking; and metal trades; (2) employees in the building trades; (3) employees in the

These averages are weighted combinations of average hourly earnings in 25 manufacturing industries combined (National Industrial Conference Board: "Wages in the United States"), average hourly earnings in Class I, steam railroads (Computations of National Industrial Conference Board, based on the monthly reports of the Interstate Commerce Commission: "Wage Statistics of Class I Steam Roads in the United States"), average wage rates per hour in 17 building trades in 23 cities (National Industrial Conference Board: "Wages in the United States", based on rates published monthly by "The American Contractor"), and average hourly earnings in bituminous coal mines (United States Department of Labor, Bureau of Labor Statistics: "Special Bulletins" and "Monthly Labor Review" - September, 1929).

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1911	13.89	93	1921	28.63	192
1912	14.34	96	1922	28.07	188
1913	14.79	99	1923	30.39	204
1914	14.91	100	1924	30.96	208
1915	15.14	102	1925	31.72	213
1916	16.46	110	1926	31.38(c)(d)	210
1917	18.78	126	1927	32.10(d)	215
1918	23.13	155	1928	32.45(d)	218

(a) As computed for the years 1908 to 1925, inclusive, by Paul H. Douglas ("Real Wages in the United States, 1890-1926", page 211), and, for the years 1926, 1927, and 1928, by Paul H. Douglas and Florence T. Jennison, ("The Movement of Money and Real Earnings in the United States, 1926-28," page 44).

(b) The term "wage earners in all industry" as used here, includes: (1) employees in the following manufacturing industries: slaughtering and meat-packing; woolen; cotton; hosiery and knit goods; men's clothing; iron and steel; lumber and timber products (sawmills and planing mills); boots and shoes; book and job printing; newspaper printing; granite and stone; baking; and metal trades; (2) employees in the building trades; (3) employees in the

anthracite and bituminous coal mining industries; (4) unskilled labor in general; (5) federal government employees in the executive departments in Washington, D. C., and postal workers; (6) transportation workers (seamen and railway employees); (7) farm labor; (8) public school teachers; and (9) ministers (Congregational and Methodist).

(c) The average full-time weekly earnings for this year were originally given by Douglas as $32.39 ("Real Wages in the United States, 1890-1926", page 211). The difference between this figure and the revision is explained by Douglas and Jennison as arising from the fact that the latter was obtained by interpolation from the 1927 Census data, whereas the former was constructed by extrapolation from data collected prior to 1926 ("Movement of Money and Real Earnings in the United States, 1926-28" - page 1, footnote).

(d) Despite the specific statement in the preface to the article by Douglas and Jennison that "the figures presented here . . . are comparable to those in Paul H. Douglas' book, "Real Wages in the United States, 1890-1926," there appears to be some possibility that this figure is not strictly comparable with the estimates of earnings given for the years 1909 to 1925. In combining the average full-time weekly earnings per wage-earner in each of the selected industries and classes of labor into the composite averages for each of the years from 1909 to 1925, inclusive, given in this Table, Douglas weighted the earnings in each industry and class according to the number of employees in each in each year, but in computing the averages for "all industry" for 1926, 1927, and 1928, the weights were based on 1928 employment. This disparity of method is not so great as that involved in the determination of the relative importance of industries and classes of labor during the 1909 - 1925 period by the use of 1890 employment weights (see footnote (d) to Table I), for the reason that there was less shifting of employees from industry to industry and class during the three year period from 1925 to 1928 than during the thirty-eight year period from 1890 to 1928.

According to this Table, average full-time weekly earnings increased 11.2% from 1909 to 1914 (from $13.41 to $14.91) and 112.4% from 1914 to 1920 (from $14.91 to $31.67), decreased 11.4% from 1920 to 1922 (from $31.67 to $28.07), and, finally, increased 15.6% from 1922 to the end of the period (from $28.07 to $32.45). So far as the period as a whole is concerned, the total gain from 1909 to 1928 was 141.9%.

In each period, the increase in average full-time weekly earnings was slightly smaller than the corresponding increase in average hourly earnings. (*) Other things being equal, this is explained by the rapid diminution in the period as a whole in the average length of the full-time working week from 54.9 hours in 1909 to 49.8 hours in 1928 - a reduction of 9.3%. (**)

(*) See Table V.
(**) See Douglas' "Real Wages in the United States, 1890-1926", page 208.

III. AVERAGE ANNUAL EARNINGS

Table IV presents a third measure of changes in the material wealfare of labor, average earnings per wage-earner in selected manufacturing and non-manufacturing industries as a whole, (*) for each

TABLE IV.

AVERAGE ANNUAL EARNINGS (a)
OF EMPLOYED WAGE-EARNERS IN ALL INDUSTRY (b)
1909-1928

YEAR	Average Annual Earnings (in dollars)	Relative Earnings (1914=100)	YEAR	Average Annual Earnings (in dollars)	Relative Earnings (1914=100
1909	543	87	1919	1201	192
1910	574	92	1920	1407	224
1911	575	92	1921	1233	197
1912	592	94	1922	1201	192
1913	621	99	1923	1299	207
1914	627	100	1924	1303	208
1915	633	101	1925	1336	213
1916	708	113	1926	1375(c)(d)	219
1917	830	132	1927	1375(d)	219
1918	1047	167	1928	1405(d)	224

(a) As computed for the years 1909 to 1925, inclusive, by Paul H. Douglas, ("Real Wages in the United States, 1890-1926", page 392), and for the years 1926, 1927, and 1928, by Paul H. Douglas and Florence T. Jennison, ("The Movement of Money and Real Earnings in the United States, 1926 - 1928", page 87).

(b) The term "wage-earners in all industry", as used here, includes: (1) employees in the following manufacturing industries: confectionery; bread and other bakery products; dairy products (butter, cheese, and condensed milk); fruit and vegetable canning and preserving; slaughtering and meat-packing; woolen and worsted; cotton; silk; hosiery and knit goods; men's clothing; shirts; women's clothing; iron and steel (blast furnaces, steel works, rolling mills, foundries, and machine shops); farm equipment; electrical machinery; brass, bronze, and copper; silver and plated ware; lumber and timber products (sawmills and planing mills); furniture; tanned, curried and finished leather; boots and shoes; trunks and valises; saddlery and harness; paper and pulp; paper

(*)This sample of all industry is a much more representative one than that used in determining average full-time weekly earnings, due to inclusion of employees in many more industries. (See footnote (b) to Table IV).

boxes; book and job printing; newspaper and periodical printing; petroleum refining; druggists' preparations (patent medicines, perfumery, cosmetics, and toilet preparations); rubber goods; marble and stone; clay products; glass; beverages (beer and soft drinks); tobacco (cigars and cigarets); carriages, wagons and materials; railroad rolling stock; motor vehicles, (bodies and parts); and (2) employees in the following public utilities industries: steam railroads; street railways, telephone, telegraph, gas, electricity; (3) workers in the anthracite and bituminous coal mining industries; (4) salaried employees in manufacturing and clerks in railways; (5) federal government employees (in the executive departments in Washington, D. C., and postal workers); (6) public school teachers; (7) ministers (Methodists and Congregational); and (8) farm labor.

(c) Average annual earnings for this year were originally given by Douglas as $1,376 ("Real Wages in the United States, 1890-1926", page 392). The difference between this figure and the revision is explained by Douglas and Jennison as arising from the fact that the latter was obtained by interpolation from the 1927 Census data, whereas the former was constructed by extrapolation from data collected prior to 1926 ("Movement of Money and Real Earnings in the United States, 1926-1928", page 1, footnote).

(d) Unlike the figure for this year on average hourly earnings (see Table I, footnote (d) and average full-time weekly earnings (See Table III, footnote (d), this figure does appear to be comparable with the estimates given for the years 1909 to 1925. In combining the average annual earnings per wage-earner in each of the selected industries and classes of labor into the composite averages for each of the years from 1909 to 1928, inclusive, given in this Table, the earnings in each industry and class in each year, the same method thus being used throughout. This uniformity of method materially reduces any possibility of error in the series as a whole.

TABLE V.

CHANGES IN HOURLY, FULL-TIME WEEKLY, AND ANNUAL EARNINGS, COMPARED; 1909-1928

Period	Percentage Change in Average Hourly Earnings (a)	Percentage Change in Average Full-Time Weekly Earnings (b)	Percentage Change in Average Annual Earnings (c)
1909-14	+12.4%	+11.2%	-15.5%
1914-20	+117.7%	+113.4%	+124.4%
1920-22	-11.6%	-11.4%	-14.6%
1922-28	+16.7%	+15.6%	+17.0%
1909-28	+151.8%	+141.9%	+159.1%

(a) Computed from Table I.

(b) Computed from Table III.

(c) Computed from Table IV.

year from 1909 to 1928, inclusive, and shows, in addition, the percentage changes from a 1914 base, in index numbers. These figures are as determined by Paul H. Douglas for the years 1905 to 1925, inclusive, and by the same authority, in collaboration with Florence T. Jennison, for the years 1926 to 1928, inclusive.

The increases in annual earnings shown by this Table were in each case greater than the corresponding increases in both hourly earnings and full-time weekly earnings. (*) It is found that average annual earnings per wage-earner increased steadily from $543 in 1909 to $627 in 1914 (a gain of 15.5%), to $1,407 in 1920 (a gain of 124.4% over 1914), and, after a decrease of 14.6% to $1,201 in 1922, to $1,405 in 1928 (a gain of 17% over 1922).

Looking at the period as a whole, it is seen that average actual annual earnings per wage-earner in Industry as a whole increased 159.1% from 1909 to 1928.

IV. COST OF LIVING

Movements of money earnings during this period of business expansion and increasing prosperity are shown in summary form in Table V, which makes it clear that the movement is general and whether measured by changes in average hourly, average full-time weekly, or average annual earnings per wage-earner, was one of tremendous increase. However, due to changes in the purchasing power of the dollar, this increase in money wages and earnings cannot be considered as accurately reflecting the material progress of employed labor. To arrive at a true appraisal, money wages and earnings must be deflated into dollars of a constant purchasing power by the application of index numbers representing changes in cost of living as measured by retail prices of consumers' goods.

Studies of changes in the cost of living having been made by several agencies and individuals, it is necessary to explain the choice as the basis for this computation for the years after 1913, of the revised series of cost of living index numbers recently released by the Bureau of Labor Statistics of the United States Department of Labor (**) and for the period from 1909 to 1913 of a series compiled by Paul H. Douglas.

So far as choice of a series for the years after 1913 is concerned, the findings of Paul H. Douglas were used to narrow the field to some extent. (***) Douglas discarded the series prepared by the Massachusetts Commission on the Necessaries of Life as too local in character and as possibly based on too low an estimate of prevailing prices, (****) and the

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(*) See Table V.

(**) See publication of the Bureau of Labor Statistics, United States Department of Labor, entitled "Revision of Index of Cost of Goods Purchased by Wage-Earners and Lower-Salaried Workers," or article with same title in the "Monthly Labor Review", September, 1935.

(***) See pages 46-59, "Real Wages in the United States, 1890-1926."

(****) Ibid, page 50.

series determined by the National Industrial Conference Board as susceptible to error because based on: (1) data secured by the questionnaire method; (2) price quotations on too few articles in the clothing and miscellaneous groups; (3) reports from different cities in different years; and (4) pre-war budgets (*). He chose the series of the Bureau of Labor Statistics in preference to these series stating that it "is probably the best for our purposes of any now being compiled".

However, Douglas recognized several deficiencies and weaknesses in this series. He pointed out: (1) that the basic statistics were gathered from comparatively few cities; (2) that the sundries index was not based on direct quotations; (3) that the clothing index was not determined by use of weights based on actual expenditures; (4) that it would be more accurate to find the all-item indexes for the country as a whole by combining the all-item indexes for each city, than to do so by determining indexes for each commodity group for the country as a whole and then combining these indexes, the method followed by the Bureau; and (5) that it would certainly be better to combine the indexes for each city by weighting them according to the relative population of the cities, than to combine them arithmetically, as the Bureau did (**).

The last two of these flaws in the Bureau's series arising merely in the methods in which collected material had been used, Douglas undertook to compute a series of his own, based on that of the Bureau, but avoiding these two errors. The result was a series of cost of living index numbers (***) of which most were found, upon reduction of the two series to a common base year, to be from four to six points higher than those of the Bureau. This relation of the two series is shown by Table VI.

This series of Douglas has been improved upon, in turn, by a recent revision by the Bureau of Labor Statistics of its series, which introduces not only the refinements made by Douglas but others as well.

As in Douglas' series, the relative expenditure upon each of the major groups of commodities in different cities is taken into account and the budget experience of each city is weighted according to relative population (****). But in addition, the food cost indexes have been

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(*) Ibid., pages 52 and 53

(**) Ibid., pages 52 and 54

(***) Ibid, page 57

(****) See publication of Bureau of Labor Statistics, United States Department of Labor, entitled "Revision of Index of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers", pages 2, 10, and 12, or article with same title in the "Monthly Labor Review", September, 1935.

greatly improved, chiefly by inclusion of additional foods (84 after 1920 and 104 before), (*) and the all-item indexes have been considerably bettered by computation (**) of the percentage distribution of expenditures for the various budgetary items in 1913, the base year, and the use of weights based on this distribution rather than that of 1917-19, the quantity budgetary period used (***).

The effect of these last two improvements is a series more closely in accord with the original Bureau series than is that of Douglas. Whereas, most of Douglas' indexes were from 4 to 6 points higher than those of the original Bureau series, as has been seen, the numbers revised by the Bureau are somewhat lower during the years prior to 1921 and only about 1 to 3 points higher after that year. The relation of the two Bureau series is shown by Table VII, and that of the revised Bureau series and the Douglas series by Table VI.

It is obvious from these Tables that use of the Douglas cost of living index numbers in computing real wages and earnings would considerably underestimate the gains in purchasing power during the period from 1915 to 1928, just as use of the original Bureau series would overestimate such gains after 1920 and underestimate them from 1914 to 1920.

Unfortunately, the Bureau's revised series does not cover the years from 1909 to 1913, necessitating use of some other, and possibly less accurate, series for this period. However, the one chosen, that constructed by Douglas from Bureau of Labor Statistics indexes of the movement of wholesale prices of the various main groups of commodities, except rents, weighted according to 1901 relative expenditures, (****) is believed to be more accurate than any other now available.

The indexes given by the Bureau of Labor Statistics for the years 1913 to 1934 represent the cost of living in particular months of those years (usually June and December), while Douglas' indexes for the years 1909 to 1912 indicates the average cost of living throughout each of those years. It is obvious that indexes of the latter type are preferable for use in translating yearly average money earnings into yearly average real earnings. For this reason, cost of living indexes for each month of each year from 1913 to 1934 have been computed by straight-line interpolation from the series of the Bureau of Labor Statistics, and an average found for each year. The results, combined with Douglas' 1909 to 1912 series, are given in Table VIII.

(*) Ibid, pages 2-7. This correction involves a highly complicated and interesting computation, made necessary by the fact that data on purchases of the additional foods were available only in terms of quantities, not of expenditures. In brief, all 126 foods were arranged in groups according to similarity of price movement, average expenditures for the 84 or 104 being estimated from average prices determined by the Office of Home Economics of the United States Department of Agriculture, and from total food expenditures originally calculated by the Bureau. Food cost indexes were then computed by weighting expenditures for these groups of foods rather than expenditures for the 42 to 22 specific foods priced.

(**) From the distribution in 1917-19 and changes in costs of equivalent goods between 1913 and that period. Ibid, page 8.

(***) Ibid, page 7 - 9.

(****) See "Real Wages in the United States, 1890-1926", Chapter II.

TABLE VI

COMPARISONSOF VARIATIONS FROM ORIGINAL
BUREAU OF LABOR STATISTICS COST OF LIVING INDEX NUMBERS
OF DOUGLAS' DATA AND OF BUREAU OF LABOR STATISTICS REVISION:
1915-1926

Month and Year	Relation of B.L.S. revised series to B. L. S. original series (in points) (a)	Relation of Douglas' series to BLS original series (in points) (b)
December, 1915	-0.4	-0.5
" 1916	-1.7	-1.0
" 1917	-4.1	+4.5
" 1918	-7.5	+3.6
" 1919	-7.9	+4.4
" 1920	-4.8	+3.8
" 1921	+0.5	+5.2
" 1922	+0.8	+5.4
" 1923	+1.5	+5.8
" 1924	+1.8	+6.1
" 1925	+3.4	+6.6
" 1926	+3.7	+6.5

(a) Taken from Table VII.

(b) Taken from Table XI, page 55, "Real Wages in the United States 1890-1926" - by Paul H. Douglas.

TABLE VII

COMPARISON OF ORIGINAL AND REVISED
BUREAU OF LABOR STATISTICS COST OF LIVING INDEX NUMBERS;
1913-1928

Month and Year	Original Series (1913=100) (a)	Revised Series (1913=100) (b)	Relation of Revised to Original Series (c)
1913, (average)	100.0	100.0	----
December, 1914	103.0	102.7	-0.3
" 1915	105.1	104.7	-0.4
" 1916	118.3	116.6	-1.7
" 1917	142.4	138.3	-4.1
" 1918	174.4	166.9	-7.5
" 1919	199.3	191.4	-7.9
" 1920	200.4	195.6	-4.8
" 1921	174.3	174.8	+0.5
" 1922	169.5	170.3	+0.8
" 1923	173.2	174.7	+1.5
" 1924	172.5	174.3	+1.8
" 1925	177.9	181.3	+3.4
" 1926	175.6	178.3	+2.7
" 1927	172.0	175.1	+3.1
" 1928	171.3	173.3	+2.0

(a) "Monthly Labor Review", August, 1934.

(b) "Monthly Labor Review", September, 1935, or the excerpt therefrom entitled "Revision of Index of Cost of Goods Purchased by Wage-Earners and Lower-salaried Workers".

(c) Difference between original series column and revised series column.

TABLE VIII

COST OF LIVING- 1909 to 1928 BY MONTHS

1909 Month and Year	Cost of Living Indexes 1913-100 (a)	Month and Year	Cost of Living Indexes 1913-100 (a)	Month and Year	Cost of Living Indexes 1913-100 (a)
1909	88.0	1916	111.2	1919	176.2
1910	93.0	Jan.	105.7	Jan.	167.6
1911	96.0	Feb.	106.7	Feb.	168.3
1912	97.0	Mar.	107.7	Mar.	169.0
1913 *	100.0	Apr.	108.7	Apr.	169.7
July	100.0	May	109.7	May	170.4
Aug.	100.2	June	110.7	June *	171.1
Sept.	100.3	July	111.6	July	174.5
Oct.	100.5	Aug.	112.6	Aug.	177.9
Nov.	100.6	Sept.	113.6	Sept.	181.3
Dec.	100.8	Oct.	114.6	Oct.	184.6
1914	101.8	Nov.	115.6	Nov.	188.0
Jan.	101.0	Dec.*	116.6	Dec. *	191.4
Feb.	101.1	1917	128.4	1920	202.6
Mar.	101.3	Jan.	118.4	Jan.	194.7
Apr.	101.4	Feb.	120.2	Feb.	198.0
May	101.6	Mar.	122.0	Mar.	201.4
June	101.8	Apr.	123.8	Apr.	204.7
July	101.9	May	125.6	May	208.0
Aug.	102.1	June	127.4	June *	211.3
Sept.	102.2	July	129.3	July	208.7
Oct.	102.4	Aug.	131.1	Aug.	206.1
Nov.	102.5	Sept.	132.9	Sept.	203.5
Dec. *	102.7	Oct.	134.7	Oct.	200.8
1915	103.8	Nov.	136.5	Nov.	198.2
Jan.	102.9	Dec.*	138.3	Dec. *	195.6
Feb.	103.0	1918	153.8	1921	180.6
Mar.	103.2	Jan.	140.7	Jan.	192.3
Apr.	103.4	Feb.	143.1	Feb.	189.0
May	103.5	Mar.	145.5	Mar.	185.7
June	103.7	Apr.	147.8	Apr.	182.4
July	103.9	May	150.2	May *	179.1
Aug.	104.0	June	152.6	June	178.6
Sept.	104.2	July	155.0	July	178.2
Oct.	104.4	Aug.	157.4	Aug.	177.7
Nov.	104.5	Sept.	159.8	Sept. *	177.2
Dec. *	104.7	Oct.	162.1	Oct.	176.4
		Nov.	164.5	Nov.	175.6
		Dec. *	166.9	Dec. *	174.8

Month and Year	Cost of Living Indexes 1913-100 (a)	Month and Year	Cost of Living Indexes 1913-100 (a)	Month and Year	Cost of Living Indexes 1913-100 (a)
1922	169.4	May	172.4	Oct.	178.4
Jan.	172.8	June *	172.3	Nov.	178.4
Feb.	170.8	July	172.5	Dec. *	178.3
Mar. *	168.8	Aug.	172.7	1927	177.1
Apr.	168.9	Sept. *	172.9	Jan.	178.2
May	168.9	Oct.	173.4	Feb.	178.1
June *	169.0	Nov.	173.8	Mar.	178.0
July	168.7	Dec. *	174.3	Apr.	177.9
Aug.	168.3	1925	177.5	May	177.8
Sept. *	168.0	Jan.	174.7	June *	177.7
Oct.	168.8	Feb.	175.1	July	177.3
Nov.	169.5	Mar.	175.5	Aug.	176.8
Dec. *	170.3	Apr.	175.9	Sept.	176.4
1923	172.4	May	176.3	Oct.	176.0
Jan.	170.2	June *	176.7	Nov.	175.5
Feb.	170.1	July	177.5	Dec. *	175.1
Mar. *	170.0	Aug.	178.2	1928	173.5
Apr.	170.6	Sept.	179.0	Jan.	174.7
May	171.2	Oct.	179.8	Feb.	174.4
June *	171.8	Nov.	180.5	Mar.	174.0
July	172.7	Dec.*	181.3	Apr.	173.6
Aug.	173.6	1926	179.1	May	173.3
Sept. *	174.5	Jan.	180.9	June *	172.9
Oct.	174.6	Feb.	180.4	July	173.0
Nov.	174.6	Mar.	180.0	Aug.	173.0
Dec. *	174.7	Apr.	179.6	Sept.	173.1
1924	173.0	May	179.1	Oct.	173.2
Jan.	174.0	June *	178.7	Nov.	173.2
Feb.	173.2	July	178.6	Dec. *	173.3
Mar. *	172.5	Aug.	178.6		
Apr.	172.4	Sept.	178.5		

(a) Data for the years 1909 to 1913 are taken from Paul H. Douglas "Real Wages in the United States, 1890-1926," page 60, transferred from a 1914 to a 1913 base; the data for the months and years marked * are from the September, 1935, "Monthly Labor Review" of the Bureau of Labor Statistics; and all other data are computed from the indexes of the Bureau of Labor Statistics by means of straight-line interpolation, as explained in the text, the index for July, 1913 being assumed to be the same as that for the year, 1913.

While it is highly improbable that changes in the cost of living were evenly distributed over the months intervening between measurements, the assumption that the rate of change was constant is believed justified for this computation of yearly averages. Douglas' cost of living series, which he based on the assumption that the series of the Bureau of Labor Statistics, if extended to cover missing months, would "follow the same general relative movement" as the monthly series of the Massachusetts Commission on the Necessaries of Life and of the National Industrial Conference Board, shows a variation of more than two points between the average index number for each year and the index number for July of the corresponding year, in only one instance.(*).

The variation in this instance the year 1920, was only six points, resulting from a sharp increase of the cost of living to the middle of the year and a corresponding decrease thereafter.

The conclusion to be drawn from this correspondence of yearly average and July indexes, since such indexes if obtained by straight-line interpolation for the months between December and December of the following year must closely correspond, is that the latter method will give sufficiently accurate yearly average cost of living indexes. So far as 1920 is concerned, there is no necessity to interpolate for the July indexm this being one of the indexes given in the series of the Bureau of Labor Statistics.

Before proceeding to the measurement of real earnings, a word of caution should again be given with regard to the use of cost of living indexes (**). Those used here, while the most accurate available, are for a number of reasons undoubtedly far from precise.

As Alvin H. Hansen has said,

> "If someone should discover tomorrow the materials from which a really accurate cost of living index could be constructed for 1890 to 1914, it would be a miracle if it did not vary considerably from the Douglas index." (***).

This unreliability also applies, though probably to less degree, to the indexes of the Bureau of Labor Statistics.

V. REAL EARNINGS

Using the cost of living index number series given in Table VIII, the average money earnings per hour, full-time week, and year, shown in Tables

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(*) See Paul H. Douglas' "Real Wages in the United States, 1890 - 1926" - pages 56 and 57.

(**) See page 1 of this Chapter.

(***) See Hansen's review of Paul H. Douglas' "Real Wages in the United States, 1890-1926," in the December, 1930 issue of "The American Economic Review, page 749.

I, III, and IV, have been translated into 1913 dollars, or real earnings, thus providing a measure of the material progress of labor during the period of expansion, in terms of gains and losses in purchasing power. Such real earnings are presented in Table IX.

TABLE IX

AVERAGE REAL EARNINGS OF EMPLOYED WAGE-EARNERS IN ALL INDUSTRY; 1909-1928

Year	Average Real Hourly Earnings		Average Real Full-Time Weekly Earnings		Average Real Annual Earnings	
	In dollars of 1913 Purchasing Power (a)	Rate of Change (1909-100)	In dollars of 1913 Purchasing Power (b)	Rate of Change (1909-100)	In dollars of 1913 Purchasing Power (c)	Rate of Change (1909-100)
1909	.320	100.0	15.24	100.0	617	100.0
1910	.310	96.9	14.71	96.5	617	100.0
1911	.305	95.3	14.46	94.9	599	97.1
1912	.311	97.2	14.78	97.0	610	98.9
1913	.313	97.8	14.79	97.0	621	100.6
1914	.310	96.9	14.65	96.1	616	99.8
1915	.307	95.9	14.59	95.7	610	98.9
1916	.313	97.8	14.80	97.1	637	103.2
1917	.307	95.9	14.63	96.0	646	104.7
1918	.313	97.8	15.04	98.7	681	110.4
1919	.317	99.1	14.92	97.9	682	110.5
1920	.340	106.3	15.63	102.6	694	112.5
1921	.354	110.6	15.85	104.0	683	110.7
1922	.359	112.2	16.57	108.7	709	114.9
1923	.384	120.0	17.63	115.7	753	122.0
1924	.395	123.4	17.90	117.5	753	122.0
1925	.392	122.5	17.87	117.3	753	122.0
1926	.383	119.7	17.52	115.0	768	124.5
1927	.397	124.1	18.13	119.0	776	125.8
1928	.409	127.8	18.70	122.7	810	131.3

(a) Computed from Tables I and VIII

(b) Computed from Tables III and VIII

(c) Computed from Tables IV and VIII

The cost of living increased between 1909 and 1917 at such a rapid rate that the purchasing power of an hour's earnings and that of a full-time week's earnings actually decreased somewhat, while the purchasing power of a year's actual earnings gained slightly. Average real earnings per hour decreased 4.1%, and time earnings per week 4.0%. On the other hand purchasing power, in terms of average real annual earnings, increased 4.7%.

From 1917 on, however, the gains in money earnings outstripped the advance in the cost of living, considerably increasing purchasing power. The gains in average real earnings per hour, per full-time week, and per year, from 1917 to 1928, were, respectively, 33.2%, 27.8, and 25.4%.

CHAPTER II

WAGE MOVEMENTS - 1929 to 1933

The statistical material available for use in this chapter in tracing general wage movements through the depression years of the pre-code period is even more meagre and heterogenous than that used in Chapter I in measuring trends during the period of expansion. In this period the data are limited for the most part to manufacturing industries. Trends in all industry must be in part estimated. Attention is again (*) directed to the fact that conclusions regarding wage trends must be interpreted with due regard to the gaps in the evidence and to the errors in the materials.

I. AVERAGE EARNINGS PER HOUR

Table I, based on data of the Bureau of Labor Statistics, presents the only material available on average earnings per hour in Industry as a whole during the years, 1929 to 1933. It indicates the trend of average money, and real earnings per hour in a large sample of all Industry, including many manufacturing, mining, public utility, service, and other industries, railroads, and wholesale and retail trade.

This material is not a wholly satisfactory measure of the trends during the depression. Since based on the yearly averages for 1929 and 1933, this measure lessens the sharpness of the fluctuation which is revealed by a comparison between the highest point reached in 1929 and the lowest point reached in 1933. The extent of this source of error can be illustrated by data based on average earnings in manufacturing industries shown in Table III. This measure is valuable as a point of reference for use in conjunction with the data given in the Appendix for average annual earnings and trends in individual industries, classes for labor, and States.

So far as all Industry is concerned, average money earnings per hour decreased 23.6% from the 1929 average to that of 1933, while the purchasing power of such earnings or average real earnings per hour, actually gained 4.6% through 1931, decreased sharply then, in 1932, 5.1%, and finally rose slightly to a 1933 level 0.3% above that of 1929. The disparity between these movements of money and real earnings is explained by the 23.8% fall in the cost of living during the same period, also shown in Table I.

In comparison with the trend of average earnings per hour in manufacturing industries, based on data derived from a different source, this decrease in the trend in all Industry appears substantially greater than in manufacturing alone. Average earnings per hour in manufacturing alone, as determined by the National Industrial Conference Board, shown in Table III, fell off 16.6% from 1929 to 1933, while average real earnings per hour in manufacturing appeared actually to have increased 9.4% during the same period.

In considering the validity of the comparison of these two sets of data as portraying the approximate difference between wage movements in

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(*) See Chapter I, page 1.

TABLE I

AVERAGE EARNINGS PER HOUR OF EMPLOYEES IN ALL INDUSTRY (a);

1929 - 33

Year	Index numbers (average 1929 = 100)		
	Average Money Earnings Per Hour (b)	Average Real Earnings Per Hour (c)	Cost of living Indexes (d)
1929	100.00	100.00	100.0
1930	98.28	100.7	97.6
1931	93.13	104.6	89.0
1932	79.82	99.3	80.4
1933	76.39	100.3	76.2

(a) Including wage-earners in all manufacturing, anthracite and bituminous coal mining, metalliferous mining, quarrying, crude petroleum refining, public utilities (telephone, telegraph, electric light and power, and electric and motor bus transportation), Class I steam railroads, wholesale and retail trade, laundries, dyeing and cleaning, and hotels, union labor in the building and printing trades, and union chauffeurs, teamsters, and longshoremen.

(b) From the "Monthly Labor Review", August, 1935. Transposed from a 1913 base.

(c) The quotients of the money earnings indexes given in column 2 divided by the cost of living indexes shown in column 4.

(d) Constructed from the indexes given in Table II by reduction from a 1913 to a 1929 base.

TABLE II

COST OF LIVING; 1929 to 1935, BY MONTHS AND QUARTERS

Year, Month, and Quarter	Cost of living indexes (1913-100) (a)	Year, Month, and Quarter	Cost of living indexes (1913-100) (a)	Year, Month, and Quarter	Cost of living indexes (1913-100) (a)
1929	173.2	1931	154.3	1933	132.0
1st. Quarter	173.1	1st Quarter	160.4	January	132.9
January	173.2	January	162.0	February	132.3
February	173.1	February	160.4	March	131.7
March	173.1	March	158.8	April	131.0
2nd Quarter	172.9	2nd Quarter	155.5	May	130.4
April	173.0	April	157.1	June *	129.9
May	172.9	May	155.5	July	130.6
June *	172.8	June *	153.9	August	131.4
3rd Quarter	173.1	3rd Quarter	153.1	September	132.2
July	173.0	July	153.0	October	133.0
August	173.1	August	152.1	November	133.8
September	173.3	September	151.2	December*	134.6
4th Quarter	173.6	4th Quarter	149.3		
October	173.4	October	150.2		
November	173.6	November	149.3		
December*	173.7	December*	148.4		
1930	169.1	1932	139.3		
1st Quarter	172.6	1st Quarter	147.3		
January	173.1	January	146.8		
February	172.6	February	145.2		
March	172.0	March	147.7		
2nd Quarter	170.9	2nd Quarter	140.5		
April	171.4	April	142.1		
May	170.9	May	140.5		
June *	170.3	June *	138.9		
3rd Quarter	168.1	3rd Quarter	137.1		
July	169.2	July	138.0		
August	168.1	August	137.1		
September	167.0	September	136.2		
4th Quarter	164.7	4th Quarter	134.4		
October	165.9	October	135.3		
November	164.7	November	134.4		
December*	163.6	December*	133.5		

(a) The data for the months marked * are from the September, 1935, "Monthly Labor Review" of the Bureau of Labor Statistics, the indexes for intervening months being constructed therefrom by straight-line interpolation. In computing the indexes for the first five months of 1929, the index used in connection with that for June, 1929, was that for December, 1928, shown in Table VIII of Chapter I. The yearly and quarterly index numbers were obtained by averaging the monthly data.

TABLE III

AVERAGE EARNINGS PER HOUR OF EMPLOYEES IN ALL MANUFACTURING (a); 1929 - 1933

Date	Average Money Earnings Per Hour (b)	Average Real Earnings Per Hour (1913 = 100) (c)
Average, 1929	.589	.340
1st Quarter, 1929	.586	.339
2nd Quarter, 1929	.589	.341
3rd Quarter, 1929	.590	.341
4th Quarter, 1929	.592	.341
Average, 1930	.589	.348
1st Quarter, 1930	.591	.342
2nd Quarter, 1930	.592	.346
3rd Quarter, 1930	.591	.353
4th Quarter, 1930	.582	.353
Average, 1931	.565	.366
1st Quarter, 1931	.576	.359
2nd Quarter, 1931	.571	.367
3rd Quarter, 1931	.565	.372
4th Quarter, 1931	.546	.366
Average, 1932	.496	.356
1st Quarter, 1932	.526	.362
2nd Quarter, 1932	.506	.360
3rd Quarter, 1932	.484	.353
4th Quarter, 1932	.469	.349
Average, 1933	.491	.372
January, 1933	.466	.351
February, 1933	.462	.349
March, 1933	.459	.349
April, 1933	.460	.351
May, 1933	.453	.347
June, 1933	.451	.348

(a) 24 industries are included in 1929 and 1930, and after that, 25 industries.

(b) These data are from publications of the National Industrial Conference Board. The data for 1929 and 1930 are from "Wages in the United States, 1914-1930", pp 44, 47, and 54, the 1931 data from "Wages in the United States in 1931", p 52, the 1932 data from the Supplement to the "Conference Board Service Letter" of April, 1933, and the 1933 data from the Supplement to the "Conference Board Service Letter" of May, 1934.

(c) Obtained by dividing the money earnings figures appearing in the Preceding column by the corresponding cost of living index Nos. given in Table II.

TABLE III

AVERAGE EARNINGS PER HOUR OF EMPLOYEES IN ALL MANUFACTURING (a); 1929 - 1933

Date	Average Money Earnings Per Hour (b)	Average Real Earnings Per Hour (1913=100) (c)
Average, 1929	.589	.340
1st Quarter, 1929	.586	.339
2nd Quarter, 1929	.589	.341
3rd Quarter, 1929	.590	.341
4th Quarter, 1929	.592	.341
Average, 1930	.589	.348
1st Quarter, 1930	.591	.342
2nd Quarter, 1930	.592	.346
3rd Quarter, 1930	.591	.352
4th Quarter, 1930	.582	.353
Average, 1931	.565	.366
1st Quarter, 1931	.576	.359
2nd Quarter, 1931	.571	.367
3rd Quarter, 1931	.565	.372
4th Quarter, 1931	.546	.366
Average, 1932	.496	.356
1st Quarter, 1932	.526	.362
2nd Quarter, 1932	.506	.360
3rd Quarter, 1932	.484	.353
4th Quarter, 1932	.469	.349
Average, 1933	.491	.372
January, 1933	.466	.351
February, 1933	.462	.349
March, 1933	.459	.349
April, 1933	.460	.351
May, 1933	.453	.347
June, 1933	.451	.348

(a) 24 industries are included in 1929 and 1930, and after that, 25 industries

(b) These data are from publications of the National Industrial Conference Board. The data for 1929 and 1930 are from "Wages in the United States, 1914-1930", pp 44, 47, and 54, the 1931 data from "Wages in the United States in 1931", p 32, the 1932 data from the Supplement to the "Conference Board Service Letter" of April, 1933, and the 1933 data from the Supplement to the "Conference Board Service Letter" of May, 1934.

(c) Obtained by dividing the money earnings figures appearing in the preceding column by the corresponding cost of living index numbers given in Table II.

manufacturing and in manufacturing and non-manufacturing combined, the difference in the sources should be taken into account. One important difference and possibility of error arises from the fact that the voluntary questionnaire method of collecting data as used by the National Industrial Conference Board and the fieldsurvey method by the Bureau of Labor Statistics.

Inasmuch as concerns paying very low wage rates might presumably be disinclined to reveal their payroll statistics, use of the latter method undoubtedly gave lower levels of earnings in manufacturing as a whole than did the former, (*) and may have resulted in some variance in the movements of the levels.

So far as hourly earnings are concerned, Table III shows that the average money earnings per hour of employees in manufacturing, according to the National Industrial Conference Board, were reduced from $.590 in the third quarter of 1929 to $.459 in March 1933, a reduction of 22.2%. On the other hand, average real earnings per hour in manufacturing, as a result of gains due to the lowering of the cost of living, actually rose 9.1% from the third quarter of 1929 to the third quarter of 1931, falling only 6.2 % thereafter, to March, 1933. The level at this date was, accordingly, 2.3% higher than the mid-1929 level.

II. AVERAGE EARNINGS PER WEEK

Light can be thrown on the depression trends of average money and real earnings per week in all Industry from data available for manufacturing only. (**) This material taken from National Industrial Conference Board sources, is the most inclusive available on weekly earnings during the depression period. It is presented in Table II.

From $28.63 in the third quarter of 1929, the average money earnings

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(*) A comparison of National Industrial Conference Board, Bureau of Labor Statistics, and Census Bureau average hourly wage rates in the Boot andShoe Industry shows the following resultsfor January 1925, .591 for the National Industrial Conference Board, .504 for the Bureau of the Census Reports. The first mentioned was based on a comparatively small proportion of the industry, the second on a sample of approximately 50 per cent, while the Census reports were based on a coverage of upwards of 90 per cent. See Final Report, Survey Committee on the Operation of the Code for the Boot and Shoe Manufacturing Industry, (July 15, 1935) p.63, NRA Division of Review.

(**) It should be noted that these measurements are of average earnings per average week actually worked, whereas, in Chapter I, the nearest comparable payroll period used was the average normal full-time week. For this reason, the two series are unfortunately not comparable.

per week of employees in manufacturing industries dropped 49.3% to $14.53 in March 1933. (*) Average real earnings per week (in 1913 dollars), or purchasing power, on the other hand, diminished 33.3% from the third quarter of 1929 to March, 1933.

Comparing these trends with those of average money and real earnings per hour in manufacturing shown above, the loss in the purchasing power of a week's earnings, experienced by employed labor in manufacturing during the depression, was principally due to shortening of the time worked per week. Table V furnishes graphic evidence that the decrease in the cost of living of employees in manufacturing from the middle of 1929 to March, 1933, while sufficient approximately to of set hourly wage cuts, was far outweighed by reduction of the number of hours worked per week.

The decline of the cost of living during the depression, 23.9% was practically the same as the 22.2% drop in average money earnings per hour in manufacturing, one of the two factors in the determination of average money earnings per week. This left the remaining factor, average hours per week, as practically the sole cause of change in the level of the purchasing power of average money earnings per week in manufacturing. The 33.8% reduction of average hours per week was almost exactly equal to the 33.3% decline in average real earnings per week.

(*) These points of measurement are the third quarter of 1929, marking the beginning of steady recession of average earnings per week in manufacturing, and March, 1933, marking the lowest point reached by such average earnings per week. Between March and June 1933 a substantial increase took place, owing largely to the pre-NRA industrial boom caused by impending cost and price increases under NRA. Average hours per week in manufacturing, according to the May, 1934 "Supplement to Conference Board Letter" of the National Industrial Conference Board, increased 29.3% from 32.1 hours in March to 41.5 hours in June.

TABLE IV

AVERAGE EARNINGS PER WEEK OF EMPLOYEES

IN ALL MANUFACTURING (a); 1929-1933

Date	Money Earnings Per Week (b)	Real Earnings Per Week (1913=100) (c)
Average, 1929	28.52	16.47
1st Quarter, 1929	28.68	16.57
2nd Quarter, 1929	28.70	16.60
3rd Quarter, 1929	28.63	16.54
4th Quarter, 1929	28.06	16.16
Average, 1930	25.84	15.28
1st Quarter, 1930	27.39	15.87
2nd Quarter, 1930	26.71	15.63
3rd Quarter, 1930	25.07	14.91
4th Quarter, 1930	24.17	14.68
Average, 1931	22.64	14.67
1st Quarter, 1931	23.03	14.86
2nd Quarter, 1931	23.83	15.33
3rd Quarter, 1931	22:23	14.62
4th Quarter, 1931	20.68	13.85
Average, 1932	17.07	12.25
1st Quarter, 1932	19.05	13.12
2nd Quarter, 1932	16.38	12.01
3rd Quarter, 1932	15.69	11.44
4th Quarter, 1932	16.67	12.40
January, 1933	16.22	12.21
February, 1933	16.23	12.27
March, 1933	14.53	11.03
April, 1933	15.49	11.82
May, 1933	16.83	12.91
June, 1933	18.60	14.33
Average, 1933	17.71	13.42

(a) See footnote (a) to Table III.
(b) See footnote (b) to Table III.
(c) See footnote (c) to Table III.

TABLE V

COMPARISON OF CHANGES DURING THE DEPRESSION IN THE LEVELS OF AVERAGE MONEY AND REAL EARNINGS PER HOUR AND PER WEEK IN ALL MANUFACTURING

	Cost of Living (1913=100) (a)	Average Hours Per Week (b)	Average Money Earnings Per Hour (c)	Average Real Earnings Per Hour (1913=100) (c)	Average Money Earnings Per Week (d)	Average Real Earnings Per Week (1913=100) (d)
Third Quarter, 1929	175.1	48.5	.590	.341	28.63	16.54
March, 1933	131.7	32.1	.459	.349	14.53	11.03
Percent Change	-23.9	-33.8	-22.2	+2.4	-49.5	-33.3

(a) From Table II.

(b) 1929 data from "Wages in the United States, 1914-1930", National Industrial Conference Board, page 44; 1933 data from "Supplement to Conference Board Service Letter", National Industrial Conference Board, May, 1934.

(c) From Table III.

(d) From Table IV.

III. AVERAGE ANNUAL EARNINGS PER EMPLOYED WORKER

The average amounts actually earned per year by wage earners since the depression are not known. Some approximation to the movement of annual earnings may be obtained for manufacturing industry by dividing the total wages paid by the average number of employed wage earners, as shown by the Census of Manufactures. The results of such divisions, as presented by the Bureau of Labor Statistics, are given in Table VI for the years 1929, 1931 and 1932. It is important to note that these results measure the average amounts received by those wage earners who were employed for the average length of time which was worked by those whose names appeared on the payrolls. The annual earnings given in Table VI are not comparable with those described in Chapter I for two reasons:

(1) The figures available since 1929 apply only to manufacturing industry.

(2) No account is taken of loss of earnings by reason of unemployment, except such unemployment as is represented by the payrolls. The annual earnings given for the pre-depression period had been deflated to take account of all unemployment.

On the other hand, these census results fail to measure the annual earnings of full-time workers, just because they do include loss of earnings of workers whose neames appear on the payroll but who have left employment before the end of the payroll period which is taken. (*)

In spite of all their defects, these figures on annual earnings are worth some notice, since they furnish a measure of the decline in earnings of the average employed worker. As a result of the depression, the annual earnings, even of these employed workers, declined by 33.9% from $1315 in 1929 to $869 in 1933. Table VI also shows a decline of 13.3% when these annual earnings of average employed workers are computed in dollars of constant purchasing power.

(*) Compare Douglas, "Real Wages in the United States", p. 218 and Monthly labor Review, August 1935, p. 431.

TABLE VI

AVERAGE EARNINGS PER YEAR OF EMPLOYEES IN ALL MANUFACTURING; 1929 - 1931 - 1933

Year	Average Money Earnings Per Year (a)	Average Real Earnings Per Year (1913=100 (b)
1929	$1,315	$759
1931	1,110	719
1933	869	658

(a) From the "Monthly Labor Review", August, 1935, pp 431-432.

(b) For method of computation see footnote (c) to Table III.

IV. UNEMPLOYMENT

In order that a proper perspective may be kept on the effect of the depression on labor, its effects on employed labor noted in this Chapter must be considered in connection with the tremendous increase in unemployment during the period. (*)

Not only was there a 33 1/3% decrease in the purchasing power of the average earnings per week of employees in manufacturing (**) but also the number of employees in manufacturing, receiving the earnings indicated, was over 4½ million less in March 1933, than in the third quarter of 1929. (***) So far as all Industry, manufacturing and non-manufacturing, is concerned, the number of employed decreased 43.1%, from an estimated 47,749,000 to 34,716,000 during the same period.

V. EARNINGS BY INDUSTRIES, STATES, AND CLASSES OF LABOR

The movements of earnings during the depression in specific industries, certain classes of labor, and individual states, shown in the appendix tables, while widely varying, in the main bear out the conclusions reached above as to trends in all Industry and in all manufacturing.

These tables may be grouped by subject matter, as follows: (1) average earnings in individual industries in more than one year; (2) average earnings in individual industries in a single year; (3) actual earnings in individual industries in more than one year, showing the "frequency" distribution of employees receiving classified amounts; (4) actual earnings in individual industries in a single year, showing the "frequency" distribution of employees receiving classified amounts (****); (5) average earnings in individual states in more than one year, by industries; (6) average earnings in individual states in a single year, by industries; (7) actual earnings in individual states in more than one year (frequency distributions); (8) actual earnings in individual states in a single year (frequency distributions); (9) average earnings, miscellaneous, in more than one year; (10) average earnings, miscellaneous, in a single year; and (11) actual earnings, miscellaneous, in more than one year (frequency distributions).

(*) This is treated at length in the study "Unemployment and Reemployment, 1909 to 1935", now being prepared by Anne Page of the Reemployment Unit, Labor Studies Section.

(**) See Table V

(***) All data on employment are from the study, "Unemployment and Reemployment, 1909 to 1935" by Anne Page of the Reemployment Unit, Labor Studies Section, and are based on estimates made by the President's Committee on Economic Security. They represent the number of individuals employed rather than the number of man-hours worked.

(****) Frequency distributions are given not only to show trends of earnings, but to show the actual low levels to which such earnings descended.

APPENDIX I.

I. METHODOLOGY

The methods used in the present report are limited by reason of lack of time and money to an exploration of already existing materials. It has been possible, however, to bring new recent data on cost of living to bear upon the subject of changes in real wages. For the second chapter dealing with wages during depression, time has been lacking even for a comprehensive survey of existing materials available in scattered reports of federal and state bureaus.

II. ADDITIONAL RESEARCH NEEDED

Additional analysis is required for a full treatment of the course of wages during the period of prosperity to show the trends in wage rates for particular industries, occupations, and other significant subdivisions.

Additional data needed for Chapter II are as follows:

(1) Analysis of the trends of wages and earnings according to industry, occupation, sex, race, geographical area, and unionization.

(2) A discussion of the effect of unemployment on average annual earnings, based on Chapter 26 of Douglas' "Real Wages in the United States, 1890-1926", and other sources.

(3) A summary of additions to working-class incomes other than increased real earnings. This would be based on Douglas' "Real Wages in the United States, 1890-1926", Chapter 27, in which it is estimated that the total gain in the purchasing power of the employed worker from 1890-99 to 1926 was 55%, made up of gains of 35% in real earnings, 8% due to decreased unemployment, 5% from a decrease in the number of dependents, and 7% in free income from additional social services provided by State and local governments, increased charitable and private donations, and added benefits from welfare work, pensions, and workman's compensation (minus a possible increased cost of urban life and greater use of public services by the middle class).

(4) A comparison of Douglas' computations of average annual earnings with those of Paul F. Brissenden, contained in his "The Earnings of Factory Workers", a Census Monograph, based on Appendix A to Douglas' "Real Wages in the United States, 1890-1926".

(5) A comparison of money and real earnings, per hour, full time week, and year, in index numbers.

APPENDIX II

TABLES

PART I

GENERAL TABLES

Table I

Trend of average earnings per hour,
by industry and sex.

	Industry and sex	Average earnings per hour					
		Before 1929	1929	1930	1931	1932	1933
	Boots & Shoes						
	Males & Females	.530 (1928)	---	.510	---	.412	---
	Males	.625 (1928)	---	.604	---	.493	---
1	Females	.387 (1928)	---	.382	---	.308	---
	Coal Mining, anthracite						
	Miners & miners' laborers, males	1.063 (1924)a	---	---	.924 a	---	---
2	All others, males	.637 (1924)	---	---	.660		
	Coal mining, bituminous						
	Miners & loaders, males	---	.687 a	---	.539 a	---	.395 a
3	All others, males	---	.606	---	.505	---	.437
	Cotton goods						
	Males & Females	.324 (1928)	---	.325	---	.266	---
	Males	.345 (1928)	---	.346	---	.284	---
4	Females	.286 (1928)	---	.293	---	.234	---
	Textile dyeing & finishing						
	Males & Females	---	---	.452	---	.400	---
	Males	---	---	.473	---	.418	---
5	Females	---	---	.335	---	.291	---
	Foundries						
	Males & Females	---	.624	---	.600	---	.482
	Males	---	.625	---	.601	---	.483
6	Females	---	.451	---	.422	---	.314
	Furniture						
	Males & Females	---	.490	---	.411	---	---
	Males	---	.499	---	.416	---	---
7	Females	---	.345	---	.314	---	---
	Hosiery						
	Males & Females	.488 (1928)	---	.497		.376	---
	Males	.724 (1928)	---	.707		.494	---
8	Females	.360 (1928)	---	.366		.282	---
	Iron & Steel						
	Males	----	.674	---	.663	---	---
9							

	Before 1929	1929	1930	1931	1932	1933
Machine Shops						
Males & Females	---	.638	---	.634	---	.540
Males	---	.641	---	.637	---	.545
10 Females	---	.393		.408	---	.351
Men's Clothing						
Males & Females	.731 (1928)	---	.701	---	.606	---
Males	.924 (1928)	---	.885	---	.641	---
11 Females	.534 (1928)	---	.504	---	.361	---
Metalliferous mining						
12 Males	.659 (1914)	---	---	.559	---	---
Motor Vehicles						
Males & Females	.750 (1928)	---	.734	---	.638	---
Males	.756 (1928)	---	.733	---	.658	---
13 Females	.487 (1928)	---	.476	---	.361	---
Portland Cement						
Males & Females	---	.617	---	---	.401	---
Males	---	.618	---	---	.401	---
14 Females	---	.512	---	---	.386	---
Pottery						
Semi-vitreous						
Males & Females	.696 (1926)	---	---	---	.450	---
Males	.705 (1926)	---	---	---	.475	---
Females	.389 (1926)	---	---	---	.392	---
Vitreous						
Males & Females	.621 (1926)	---	---	---	.478	---
Males	.638 (1926)	---	---	---	.546	---
15 Females	.329 (1926)	---	---	---	.264	---
Rayon & Synthetic Yarn						
Males & Females	---	---	.641	---	.359	---
Males	---	---	.604	---	.408	---
16 Females	---	---	.744	---	.307	---
Sawmills						
17 Males	.371 (1928)	---	.509	---	.256	---
Slaughtering & meat-packing						
Males & Females	---	.604	---	.449	---	---
Males	---	.625	---	.470	---	---
18 Females	---	.369	---	.321	---	---

	Before 1929	1929	1930	1931	1932	1933
Underwear, knitted						
Males & Females	.354 (1928)	---	.357	---	.292	---
Males	.453 (1928)	---	.458	---	.408	---
19 Females	.329 (1928)	---	.330	---	.260	---
Woolen & Worsted Goods						
Males & Females	------	---	.460	---	.394	---
Males	------	---	.516	---	.447	---
20 Females	------	---	.393	---	.337	---
Air Transport:						
Ground Personnel:						
Males & Females	----	---	---	.640	---	.608
Males	----	---	---	.645	---	.613
21 Females	---	---	---	.497	---	.457

"Monthly Labor Review" (July, 1933) of the Bureau of Labor Statistics, U. S. Department of Labor.

a Based on hours at face or seat of coal in mine, including time for lunch.

Table II

Trend of average full-time earnings per week, by industry and sex.

Industry and sex	Average full-time earnings per week					
	Before 1929	1929	1930	1931	1932	1933
1	26.02 (1928)	-----	24.94	-----	20.15	------
	30.63 (1928)	-----	29.48	-----	24.11	------
	19.53 (1928)	-----	18.68	-----	15.06	------
4	17.30 (1928)	-----	17.36	-----	14.20	------
	18.60 (1928)	-----	18.58	-----	15.25	------
	15.66 (1928)	-----	15.50	-----	12.40	------
5	-----	-----	23.01	-----	20.52	------
	-----	-----	24.12	-----	21.49	------
	-----	-----	16.92	-----	14.00	------
6	-----	31.82	-----	30.18	-----	23.81
	-----	31.88	-----	30.23	-----	23.86
	-----	22.41	-----	20.35	-----	15.17
7	-----	25.43	-----	21.29	-----	------
	-----	26.00	-----	21.59	-----	------
	-----	17.42	-----	15.64	-----	------
8	25.42 (1928)	-----	25.04	-----	19.51	------
	37.94 (1928)	-----	37.05	-----	25.79	------
	18.68 (1928)	-----	19.07	-----	15.10	------
9	-----	36.48	-----	34.58	-----	------
10	-----	32.09	-----	31.57	-----	26.19
	-----	32.24	-----	31.72	-----	26.43
	-----	19.67	-----	20.07	-----	16.64
11	32.16 (1928)	-----	31.05	-----	22.47	------
	40.75 (1928)	-----	39.21	-----	28.40	------
	23.44 (1928)	-----	22.28	-----	16.06	------
12	29.63 (1924)	-----	-----	28.34	-----	------
13	37.05 (1928)	-----	35.33	-----	30.40	------
	37.35 (1928)	-----	35.70	-----	30.82	------
	24.50 (1928)	-----	22.06	-----	18.23	------

Table II (Continued)

Trend of average full-time earnings per week, by industry and sex.

Industry and sex	Average full-time earnings per week					
	Before 1929	1929	1930	1931	1932	1933
	------	31.43	-----	-----	23.66	-----
14	------	31.49	-----	-----	23.70	-----
	------	20.23	-----	-----	18.76	-----
	------	-----	22.14	-----	17.30	-----
16	------	-----	25.75	-----	19.83	-----
	------	-----	16.86	-----	13.47	-----
17	21.00 (1928)	-----	20.28	-----	14.28	-----
	------	24.80	-----	22.09	-----	-----
18	------	25.88	-----	23.12	-----	-----
	------	18.04	-----	15.70	-----	-----
	17.70 (1928)	-----	17.96	-----	14.80	-----
19	22.92 (1928)	-----	23.31	-----	20.85	-----
	16.38 (1928)	-----	16.57	-----	13.16	-----
	------	-----	22.82	-----	19.82	-----
20	------	-----	25.65	-----	22.62	-----
	------	-----	19.40	-----	16.35	-----
	------	-----	-----	31.66	-----	30.25
21	------	-----	-----	31.89	-----	30.55
	------	-----	-----	23.85	-----	21.39

"Monthly Labor Review" (July, 1933) of the Bureau of Labor Statistics, U. S. Department of Labor.

a Based on hours at face or seam of coal in mine, including time for lunch.

Table III

Trend of average actual earnings per week, by industry and sex.

Industry and sex	Average actual earnings per week					
	Before 1929	1929	1930	1931	1932	1933
1	23.75 (1928)	-----	21.62	-----	16.62	-----
	28.14 (1928)	-----	25.79	-----	19.73	-----
	17.64 (1928)	-----	16.04	-----	12.58	-----
2	81.82 (1924)a	-----	-----	73.57a	-----	-----
	67.23 (1924)a	-----	-----	66.02a	-----	-----
3	-----	49.85a	-----	33.82a	-----	-----
	-----	52.57a	-----	41.58a	-----	-----
4	13.56 (1928)	-----	13.88	-----	11.78	-----
	14.76 (1928)	-----	15.19	-----	12.91	-----
	11.99 (1928)	-----	11.98	-----	9.87	-----
5	-----	-----	22.29	-----	19.99	-----
	-----	-----	23.99	-----	21.37	-----
	-----	-----	14.20	-----	12.65	-----
6	-----	30.39	-----	20.06	-----	14.25
	-----	30.50	-----	20.13	-----	14.28
	-----	19.08	-----	12.40	-----	9.51
7	-----	24.52	-----	16.88	-----	-----
	-----	25.12	-----	17.22	-----	-----
	-----	16.03	-----	11.40	-----	-----
8	23.01 (1928)	-----	20.83	-----	15.53	-----
	36.28 (1928)	-----	31.85	-----	21.80	-----
	16.46 (1928)	-----	14.66	-----	11.54	-----
10	-----	32.06	-----	24.22	-----	18.71
	-----	32.30	-----	24.36	-----	18.87
	-----	18.41	-----	15.85	-----	11.98
11	29.64 (1928)	-----	26.48	-----	18.87	-----
	38.51 (1928)	-----	34.84	-----	24.75	-----
	21.07 (1928)	-----	18.24	-----	13.01	-----

	Before 1929	1929	1930	1931	1932	1933
	35.14 (1928)	-----	25.01	-----	20.00	-----
13	35.56 (1928)	-----	25.40	-----	20.36	-----
	20.04 (1928)	-----	13.86	-----	11.09	-----
	-----	29.25	-----	-----	18.35	-----
14	-----	29.33	-----	-----	18.39	-----
	-----	18.12	-----	-----	10.52	-----
	43.27 (1925)b	-----	-----	-----	25.93b	-----
	52.44 (1925)b	-----	-----	-----	31.74b	-----
15	26.54 (1925)b	-----	-----	-----	15.95b	-----
	42.23 (1925)b	-----	-----	-----	19.15b	-----
	53.25 (1925)b	-----	-----	-----	25.03b	-----
	25.47 (1925)b	-----	-----	-----	10.72b	-----
	-----	-----	19.76	-----	16.64	-----
16	-----	-----	23.53	-----	19.51	-----
	-----	-----	14.55	-----	12.55	-----
17	19.03 (1928)	-----	17.46	-----	10.25	-----
	-----	24.18	-----	20.38	-----	-----
18	-----	25.45	-----	21.57	-----	-----
	-----	16.54	-----	13.61	-----	-----
	15.36 (1928)	-----	14.50	-----	11.08	-----
19	21.76 (1928)	-----	20.65	-----	17.72	-----
	13.89 (1928)	-----	13.04	-----	9.56	-----
	-----	-----	18.73	-----	16.13	-----
20	-----	-----	21.97	-----	19.26	-----
	-----	-----	15.19	-----	12.59	-----
	-----	-----	-----	31.05	-----	30.25
21	-----	-----	-----	31.89	-----	30.55
	-----	-----	-----	23.85	-----	21.48

Source: Ibed

a) Per half month rather than one week.

b) Per two weeks rather than one week.

TABLE 4

RETAIL TRADE: AVERAGE ANNUAL EARNINGS OF FULL-TIME WORKERS ONLY

By Kind of Business - 1929 - - - 1933.

Kind of Business	Average annual earnings of full-time employees		Percent of Change
	1933	1929	
UNITED STATES	$986	$1,312	-25
Food group	1,074	1,284	-16
Grocery stores	1,019	1,197	-15
Combination stores	1,035	1,250	-17
Meat markets	1,133	1,440	-21
Candy & confectionery stores	748	895	-16
Dairy products stores (including milk dealers)	1,478	1,804	-18
Bottled Beer & liquor stores	984	----------	----------
Other food stores	944	1,189	-21
Restaurants & eating places	673	909	-26
Eating places	669	909	-26
Drinking places	781	----------	----------
Farmers Supplies & country gen'l stores	846	1,089	-22
Country general stores	788	1,025	-23
Farmers' supply stores	978	1,235	-21
General merchandise group	935	1,126	-17
Dept.stores, including mail order	990	1,243	-20
Dry-goods stores	883	1,078	-18
Variety stores, 5-10 to 1.00 stores	760	706	+8
Other gen'l.merchandise stores	894	1,092	-18
Apparel Group	1,105	1,480	-25
Men's stores	1,291	1,769	-27
Women's ready-to-wear spec.stores	991	1,293	-23
Family clothing stores	1,141	1,450	-21
Shoe stores	1,188	1,595	-26
Accessories & other apparel stores	998	1,408	-29
Automotive group	1,011	1,461	-31
Motor-vehicle dealers	1,041	1,585	-34
Accessories tire, battery dealers	1,113	1,471	-24
Filling stations	990	1,208	-18
Garages & repair shops	936	1,354	-31
Other automotive stores	1,070	1,408	-24
Furniture & Household Group	1,159	1,593	-27
Furniture stores	1,223	1,631	-25
Household and appliance stores	1,065	1,526	-30
Radio stores	1,107	1,559	-29
Other furniture & h.hold stores	1,106	1,613	-28
Lumber, building & hardware group	1,143	1,579	-28
Lumber dealers	1,196	1,623	-26
Hardware stores, incl.farm implements	1,068	1,430	-25
Heating & Plumbing stores	1,125	1,696	-34
Other building (paint, glass, & electric) stores	1,156	1,570	-26
Cigar stores	878	1,181	-26
Coal & Wood yards	1,130	1,463	-23
Drug stores	985	1,260	-22
Jewelry stores	1,376	1,783	-23
Newsdealers	678	842	-19
Other Retail Stores	1,200	1,562	-23
Second-hand stores	896	1,303	-31

SOURCE: Monthly Labor Review, U.S.B.L.S., April, 1935.

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TABLE 5

UNSKILLED STREET LABOR

Wage Rates Per Hour, by City; Number Distribution; October, 1928 - December, 1932

Wage Rates Per Hour	CITIES	
	October 1928	December 1932
Total	3,636	2,733
Under 15¢	4	166
15¢ and under 20¢	64	123
20¢ and under 25¢	119	123
25¢ and under 30¢	193	246
30¢ and under 35¢	301	366
35¢ and under 40¢	313	389
40¢ and under 45¢	593	485
45¢ and under 50¢	193	195
50¢ and under 55¢	353	406
55¢ and under 60¢	154	90
60¢ and under 70¢	194	125
70¢ and under 80¢	35	13
80¢ and under 85¢	3	1

SOURCE: Monthly Labor Review U. S. BLS. July, 1933

TABLE 6

FEDERAL-AID HIGHWAY PROJECTS:
COST OF LABOR

Average Wage Rates Per Hour
by Region; 1929 to 1931, and
January to October, 1932

Year and Month	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
1929	51	43	39	37	28	26	31	47	55	39
1930	50	42	38	37	25	24	28	47	57	39
1931	45	37	36	35	22	20	23	45	51	36
1932:										
January	41	37	40	38	18	19	24	45	50	32
February	46	40	40	42	21	17	25	44	49	33
March	44	38	40	37	19	16	27	45	47	34
April	39	40	37	33	20	19	24	44	49	33
May	34	36	36	38	20	19	35	44	47	32
June	34	35	36	31	20	19	35	44	47	33
July	34	34	35	31	18	19	36	44	46	32
August	33	34	36	31	18	19	26	43	47	33
September	34	34	36	34	19	19	26	44	47	32
October	34	35	37	32	19	19	27	44	43	33

SOURCE: Monthly Labor Review U. S. BLS. March, 1933

TABLE 7

AVERAGE ENTRANCE WAGE RATES PER HOUR FOR ADULT MALE COMMON LABOR, IN 13 INDUSTRIES; JULY OF EACH YEAR, 1926 to 1933

Industry	Average entrance wage rate per hour (in cents)							
	1926	1927	1928	1929	1930	1931	1932	1933
All Industries.....	42.8	42.6	44.9	43.7	43.1	41.2	38.1	35.0
Automobile.....	46.1	46.3	57.2	49.9	48.2	57.7	62.0	46.5
Brick, tile and terra cotta.....	40.7	42.2	39.4	37.8	38.0	33.9	28.9	24.7
Cement.....	40.1	39.2	37.2	37.8	37.9	37.2	30.6	29.5
Electrical machinery apparatus, and supplies	43.1	44.2	46.0	45.9	44.8	42.9	39.6	37.1
Foundry and machine-shop products.....	37.1	37.8	38.4	39.8	39.0	38.2	34.8	31.8
Iron and Steel.....	42.7	43.2	43.5	42.5	42.1	41.8	31.3	33.6
Leather.....	40.9	41.4	42.3	42.2	41.9	39.1	33.9	31.6
Lumber (sawmills.....	33.6	33.2	31.7	33.0	31.6	27.7	21.5	20.8
Paper and Pulp.....	42.8	42.5	44.3	44.0	43.2	37.2	35.6	33.6
Petroleum refining.....	47.9	44.0	45.4	45.7	48.1	47.5	43.1	40.7
Slaughtering and meat-packing.....	41.5	41.7	42.2	43.0	41.8	41.7	34.6	32.3
Public utilities.....	43.0	39.8	42.9	42.8	44.6	44.6	41.5	38.7
General contracting.....	47.1	48.2	47.4	48.3	47.0	42.6	39.9	36.3

SOURCE: "Monthly Labor Review", U. S. B.L.S. December, 1934

TABLE 3

LOUISIANA: UNSKILLED AND SEMI-SKILLED LABOR:

Wage Rates Per Day
By Class of Labor
1929 - 1931

Class of Labor	Wage Rate Per day		Hours Per Day	
	1929	1931	1929	1931
Building Laborers	$2.50	$ - -	8	- -
Canners	1.25	1.00	10	10
Clothing-factory workers	1.25	1.00	10	10
Common labor	- -	1.50	- -	10
Cottonseed-product workers	2.25	2.00	12	12
Ice, light, and bottling workers	1.50	1.25	10	10
Lumbering plant workers	1.75	1.50	10	10
Naval stores workers	1.75	1.50	10	10
Oil field workers	3.00	2.50	10	10
Rice Mill workers	2.00	1.50	12	12
Sugar can field and farm labor	1.25	1.00	12	12
Sugar mill workers	2.50	2.00	12	12

Source: "Monthly Labor Review" U. S. BLS September, 1932

TABLE 9

MINNESOTA

Average Wages Per Week, by Industry; Years Ending June 30, 1931 and 1932

Industry	Average Wages Per Week	
	Year Ending June 30, 1931	Year Ending June 30, 1932
All Industry	$ 27.81	$ 25.81
Farming	21.37	18.69
Operating agricultural machinery	24.37	23.06
Mining	30.41	26.70
Quarrying	28.50	26.61
Stone Products	29.34	28.27
Clay Products	26.90	26.20
Brick and tile	25.84	25.66
Glass products	31.35	29.58
Ore reduction and smelting	37.60	33.77
Rolling mills and steel works	30.94	33.77
Structural iron and steel	30.44	33.56
Metal products	27.33	25.86
Foundries	28.49	26.68
Machinery and instruments	28.43	27.22
Agricultural machinery and implements	23.19	25.48
Vehicles	23.03	27.51
Logging	17.99	15.55
Sawmills	24.59	20.43
Planing and lath mills	26.91	23.75
Woodworking	25.71	25.03
Leather and fur	25.69	25.04
Boots and shoes	23.38	19.61
Rubber and composition goods	25.35	24.51
Chemicals and allied products	26.07	24.17
Paper and paper products	24.62	23.57
Printing and publishing	28.53	26.11
Textiles	22.31	19.40
Clothing and furnishings	24.14	21.15
Laundering, cleaning, and dyeing	24.28	22.15
Flour and grist mills	23.75	26.48
Bakeries	25.54	23.07
Dairy Products	30.32	29.55
Slaughtering and meat packing	25.78	25.98
Brewing and bottling	26.51	25.66
Other food products	24.80	25.95
Miscellaneous manufacturing	26.87	27.16
Wrecking and moving	22.95	20.56
Grading, excavating, foundations	26.05	26.06

MINNESOTA (2)

Industry	Average Wages Per Week	
	Year Ending June 30, 1931	Year Ending June 30, 1932
Erecting	$ 32.29	$ 30.23
Finishing, equipping, and installing	36.73	33.58
Electric railways	26.11	26.10
Bus and truck lines	32.36	29.56
Garages	29.68	27.26
Grain elevators	30.47	27.56
Cartage and storage	25.67	23.55
Stockyards	34.14	27.92
Telephone and telegraph	26.18	27.04
Transportation by water	31.00	27.60
Public utilities	33.84	31.28
Offices	30.43	25.86
Stores	25.56	23.34
Yards not otherwise classified	26.74	25.72
Lumber yards	28.69	27.22
Salesmen and outside agents	31.78	27.39
Domestic service	21.69	19.60
Personal service	21.16	22.68
Professional service	23.98	22.11
Municipal and public service	29.96	28.55
Miscellaneous industries	30.30	27.21
Aviation	28.41	31.70

Source: "Monthly Labor Review" U. S. DLS. August, 1933

TABLE 10

NEW YORK STATE FACTORIES: AVERAGE EARNINGS PER WEEK; 1929 to 1933

Year	Average Earnings Per Week (a)
1929	$ 29.99
1930	28.81
1931	26.42
1932	22.73
1933	21.83

Source: "Monthly Labor Review", U. S. B.L.S. March, 1934.

(a) For all employees in both office and shop, in representative New York State factories.

Table II

Ohio

Average annual earnings of wage-earners (a), by industries; 1929 to 1932

Industry	1929	1930	1931	1932
All manufacturing industries	1,499	1,365	1,185	960
Leather & Leather Products	1,096	922	864	690
Boots, shoes, cut stock & findings	1,050	859	816	650
Tanned, curried & finished leather	1,430	1,344	1,242	999
Other leather & leather products	1,132	1,022	882	177
Liquors & Beverages	1,275	1,178	1,047	834
Distilled liquors	----	----	----	---
Malt liquors	----	----	----	---
Soda & mineral waters	1,456	1,434	1,365	1,161
Other liquors & beverages	1,669	1,664	1,521	1,331
Metal & Metal Products (except iron & steel)	1,434	1,355	1,155	973
Brass, bronze & aluminum products	1,564	1,436	1,268	997
Clocks, watches & materials	1,585	1,470	1,305	1,113
Copper, tin & sheet-iron products	1,401	1,239	1,058	906
Furniture & office fixtures	1,535	1,380	1,200	956
Gas & electric fixtures & lamps & reflectors	1,247	1,336	1,222	1,095
Jewelry (including reducing & refining	1,507	1,482	1,212	1,079
Other metals & metal products	1,518	1,376	1,270	1,049
Paper & printing	1,158	1,151	1,160	1,139
Paper bags	1,111	1,099	1,038	874
Fancy & paper boxes, & drinking cups	1,237	1,149	1,103	900
Envelopes	1,085	1,061	1,011	907
Labels & tags	1,147	1,167	1,317	1,204
Paper, including stationery	1,386	1,337	1,240	1,027
Photo-engraving	2,610	2,384	2,158	1,960
Printing & publishing	1,622	1,580	1,436	1,289
Stereotyping & electrotyping	2,001	1,915	2,000	1,730
Other paper & printing	1,331	1,431	1,338	1,018
Rubber products	1,562	1,450	1,254	1,011
Druggists' sundries & toys	1,215	1,101	968	808
Tires & tubes	1,600	1,492	1,294	1,040
Other rubber products	1,306	1,152	978	801
Stone, Clay & Glass Products	1,319	1,187	1,096	908
Clay, brick & tile	1,291	1,154	947	693
Cement	1,739	1,620	1,455	1,136
Concrete products	1,333	1,225	1,061	916
Glass	1,346	1,190	1,109	959
Marble & stone work, stone yards	1,953	1,888	1,686	1,335
Pottery, terra cotta & fire-clay products	1,227	1,085	1,123	734
Wall plaster, including hydrated lime	1,527	1,443	1,302	901
Other stone, clay & glass products	1,332	1,293	1,092	776

Table II (Cont'd)

Ohio

Average annual earnings of wage-earners(a), by industries; 1929 to 1932

Industry	1929	1930	1931	1932
Vehicles	1,609	1,331	1,174	934
Airplanes and parts	1,604	1,718	1,761	1,527
Automobiles and parts	1,621	1,309	1,153	916
Children's carriages & sleds	1,272	1,133	1,143	845
Carriages, wagons, & materials, & repairing	1,236	1,144	943	759
Steam and street railroad cars	1,725	1,605	1,264	1,076
Ship and boat building	1,628	1,549	1,305	1,240
Other vehicles	1,580	1,344	1,282	981
Iron & Steel and their products	1,705	1,541	1,260	959
Blast furnace products	1,804	1,940	1,835	1,297
Boilers & tanks	1,639	1,514	1,329	1,068
Bolts, nuts, washers, & rivets	1,336	1,160	947	698
Calculating machines	1,569	1,531	1,197	964
Cutlery & tools	1,451	1,183	924	656
Door & shutters (steel)	1,661	1,422	1,312	795
Forgings	1,685	1,401	993	819
Foundry & machine shop products	1,598	1,399	1,160	896
Gas engines & tractors	1,648	1,586	1,532	1,044
Pumps & windmills	1,455	1,415	1,204	899
Safes & vaults	1,602	1,343	1,165	866
Steel works & rolling mills	1,928	1,762	1,396	1,088
Stoves & furnaces	1,463	1,291	1,094	877
Tin plate & turn plate	1,876	1,808	1,501	1,223
Wire	1,695	1,595	1,549	1,142
Wire work, including wire, rope & cable	1,625	1,568	1,165	1,340
Other iron & steel & their products	1,442	1,359	1,104	904
Chemicals & Allied Products	1,475	1,462	1,370	1,220
Chemicals, acids & wood distillation	1,695	1,653	1,577	1,433
Fertilizers, tankage	1,291	1,268	1,089	929
Paint & varnish	1,486	1,445	1,350	1,175
Patent medicines & drug compounds	1,090	1,114	1,119	971
Petroleum refining	1,548	1,533	1,401	1,316
Salt	1,286	1,422	1,453	1,369
Soap, candles, grease & tallow	1,401	1,416	1,323	1,131
Other chemicals & allied products	1,411	1,391	1,290	1,130
Lumber and Lumber Products	1,275	1,178	1,047	834
Boxes & packing crates	1,104	1,062	957	743

Table II (Cont'd)

Ohio

Average annual earnings of wage-earners (a), by industries; 1929 to 1932

Industry	1929	1930	1931	1932
Coffins & undertakers' supplies	1,369	1,348	1,271	1,054
Cooperage & related goods	1,196	1,095	928	759
Furniture, including upholstering	1,290	1,149	1,013	753
Matches	1,195	1,146	1,171	987
Sawmill & planing mill products	1,311	1,231	1,070	855
Wood bending, turning & carving	1,151	1,052	926	802
Other lumber & lumber products	1,272	1,154	1,017	843
Food & Kindred Products	1,331	1,363	1,212	1,067
Bakery products	1,309	1,380	1,216	1,095
Canning & preserving	839	699	627	494
Coffee, spices & peanuts (roasting & grinding)	1,041	1,110	924	937
Confectionery	893	880	797	671
Dairy products & ice cream	1,617	1,635	1,461	1,266
Flour-mill & grist-mill products	1,323	1,309	1,159	1,163
Food preparations	1,418	1,336	1,290	777
Slaughtering & meat-packing	1,480	1,491	1,340	1,139
Other food & kindred products	1,270	1,294	1,057	1,073
Tobacco	660	627	599	507
Chewing & smoking tobacco & snuff	987	1,011	1,003	811
Cigars & cigarettes	617	579	518	413
Tobacco rehandlers	530	519	573	493
Textiles	1,026	954	865	705
Awnings, tents, sails & auto fabrics	1,203	1,106	950	769
Cordage, twine, jute & linen goods	862	856	807	841
Custom tailoring	1,335	1,081	985	824
Flags, banners & regalia	1,037	983	894	599
Cloth gloves	642	545	469	346
Hosiery & knit goods	886	900	765	682
Mattresses, pillows, & cotton felts	1,144	1,133	979	798
Men's clothing, including shirts	995	925	870	667
Millinery & lace goods, including artificial flowers & feathers	1,018	994	936	733
Silk & silk goods, including throwing	1,276	1,193	1,027	905
Women's clothing, including corsets	1,091	1,010	868	753
Woolen, worsted & wool-felt goods, including fur and felt hats	1,013	919	792	644
Other textiles	1,110	1,070	987	854
Miscellaneous Manufacturing	1,379	1,285	1,196	940
Agricultural implements	1,358	1,275	1,150	879

Table II (Cont'd)

Ohio

Average annual earnings of wage-earners (a), by industries; 1929 to 1932

Industry	1929	1930	1931	1932
Dry & storage batteries	1,504	1,333	1,183	992
Coke	1,864	1,979	1,637	1,504
Dentists' supplies	1,338	1,213	1,379	1,205
Electrical machinery, apparatus & supplies	1,352	1,257	1,147	870
House furnishings, miscellaneous	1,633	1,493	1,382	1,004
Manufactured ice	1,539	1,515	1,613	1,407
Models & patterns (other than paper)	2,111	1,692	1,720	1,253
Munitions	---	---	---	---
Musical instruments(except pianos & organs	1,789	1,513	1,459	882
Pianos, organs & materials	1,358	1,241	1,109	702
Radios & parts	877	928	866	744
Roofing materials	1,855	1,516	1,540	1,116
Signs & advertising novelties	1,247	1,239	1,073	895
Sporting & athletic goods	1,297	1,268	1,084	930
Toys & games	1,065	990	879	692
Other miscellaneous manufacturing	1,308	1,207	1,082	881
Construction	1,668	1,545	1,328	982
Brick, stone & cement work	1,571	1,499	1,306	936
Electrical contracting	---	1,739	1,700	1,333
Erecting & installing machinery	1,941	2,065	1,910	1,509
General contracting, including wrecking	1,727	1,625	1,375	1,008
Oil, gas & water, drilling or producing	1,242	1,252	1,068	917
Painting & decorating	1,825	1,782	1,518	1,111
Plastering (including lathing & stucco work	1,895	1,931	1,633	1,134
Plumbing & steam fitting	1,861	1,796	1,520	1,067
Sand & gravel excavating	1,425	1,339	1,106	905
Sheet metal work & roofing	1,657	1,559	1,448	942
Street, road & sewer contracting	1,343	1,258	1,010	836
Ventilating & heating	2,057	1,804	1,567	1,026
Other construction	1,402	1,501	1,320	828
Service industries	1,180	1,123	1,066	939
Advertising	1,306	1,192	1,050	844
Banks	1,008	1,054	942	924
Barbers & hair dressers	1,336	1,135	1,059	877
Bowling alleys & parks	1,045	977	856	807
Churches	928	874	1,024	948
Clubs (country, golf, athletic & yacht	1,067	1,114	1,025	822
Garages (including auto repairing)	1,532	1,502	1,280	1,014
Hospitals & sanitariums	904	909	869	810
Hotels	818	858	779	684
Laundries, dry cleaners & renovators	1,066	1,016	934	773
Offices	2,494	1,742	1,708	1,659
Office buildings(including window cleaning)	1,104	1,119	1,071	936

Table II (Cont'd)

Ohio

Average annual earnings of wage-earners (a), by industries; 1929 to 1932

Industry	1929	1930	1931	1932
Restaurants	876	842	920	665
Schools & colleges	1,655	1,773	1,745	1,573
Servants in private homes	1,114	1,107	1,051	893
Social agencies	1,026	1,087	1,073	967
Theaters	1,605	1,630	1,593	1,345
YMCA & YWCA	938	827	792	738
Other service	1,277	1,382	1,167	1,040
Wholesale and retail trade	1,281	1,259	1,217	1,064
Wholesale & retail stores	1,358	1,316	1,217	1,077
Lumber, coal & scrap yards	1,274	1,418	1,053	852
Retail delivery (milk, ice & water)	1,360	1,782	1,628	1,410
Transportation & Public Utilities	1,406	1,402	1,343	1,199
Drayage & storage	1,487	1,506	1,365	1,190
Electric light & power	1,589	1,580	1,538	1,413
Electric railroads	1,589	1,600	1,498	1,344
Natural gas	1,338	1,307	1,358	1,159
Pipe lines (petroleum)	1,256	1,501	1,518	1,595
Taxicab & bus service	1,364	1,072	1,067	760
Telegraph & telephone	1,195	1,206	1,194	1,114
Transportation by water (including stevedoring)	1,931	1,855	1,627	1,256
Other transportation & public utilities	1,710	1,551	1,500	1,213
Agriculture	957	937	804	650
All industries (manufacturing, construction, service industries, wholesale and retail trade, transportation, public utilities, and agriculture)	1,457	1,343	1,187	978

(a) Not including bookkeepers, stenographers, office clerks, salespeople, superintendents, and managers.

Sources:

All industries: Monthly Labor Review, U. S. BLS., January, 1934 and April, 1935.
All manufacturing: "Ibid.", May, 1935.
Leather, liquors & metals; "Ibid.", December, 1934.
Paper, rubber, stone & vehicles: "Ibid.", November, 1934.
Iron: "Ibid.", April, 1934.
Chemicals: "Ibid.", September, 1934.

(Footnote continued on next page.)

(Footnote continued from previous page)

Lumber: "Ibid.", August, 1934.
Food: "Ibid.", June, 1934.
Tobacco, textiles, & miscellaneous: "Ibid.", January, 1935.
Service industries: "Ibid.", October, 1934.
Trade: "Ibid.", May, 1934.
Transportation: "Ibid.", November, 1934.
Construction: "Ibid.", October, 1935.
Agriculture: "Ibid.", April, 1935.

(Note - 1933 data should be given for some of these industries where marked "x")

TABLE 12

OHIO

Average Annual Earnings in 14 Manufacturing Industries: 1929 to 1933

Industry	1929			1930			1931			1932			1933		
	Average Annual Earnings	Wage Earners	Establishments	A.A.E. $	W.E.	E.	A.A.E $	W.E.	E.	A.A.E. $	W.E.	E.	A.A.E $	W.E.	E.
All manufacturing industries	$1,499	718,108	10,035	1,365	590,506	10,011	1,185	482,782	9,683	960	399,790	9,102	950	656,020	37,578
Chemicals & allied products	1,475	20,779	457	1,462	18,730	458	1,370	17,812	461	1,220	15,253	440	1,121	16,574	424
Food & kindred prods.	1,331	33,422	1,636	1,363	36,237	1,715	1,212	34,302	1,685	1,067	31,442	1,600	947	32,944	1,550
Iron & steel & their products	1,705	246,554	1,775	1,541	193,792	1,754	1,260	139,394	1,697	959	107,348	1,606	1,004	134,102	1,528
Leather & leather products	1,096	15,345	126	922	13,959	119	864	13,153	110	690	12,844	106	713	13,130	107
Liquors & beverages	1,484	1,817	164	1,470	1,724	163	1,396	1,583	175	1,200	1,370	158	1,234	2,361	162
Lumber & its products	1,275	23,844	1,231	1,178	19,426	1,192	1,047	15,602	1,104	834	12,255	999	745	13,229	926
Metals & metal products (other than iron & steel)	1,434	37,744	544	1,355	32,061	549	1,155	27,879	544	973	25,046	531	919	28,555	521
Paper & printing	1,158	43,871	1,158	1,151	42,022	1,151	1,160	39,933	1,160	1,139	36,817	1,139			
Rubber products	1,562	62,358	127	1,450	45,755	113	1,254	38,870	104	1,011	36,048	95			
Stone, clay & glass products	1,319	41,128	770	1,187	33,670	747	1,096	28,068	708	908	20,603	622			
Textiles	1,026	43,272	647	954	38,674	627	865	34,359	587	705	31,788	567			
Tobacco manufacturing	660	8,930	137	627	8,250	144	599	7,245	133	507	6,334	127			
Vehicles	1,609	72,727	304	1,331	51,144	297	1,174	39,613	265	934	25,684	228			
Miscellaneous	1,379	66,319	959	1,285	55,063	982	1,196	44,971	950	940	36,959	884			

Source: "Monthly Labor Review", U.S.B.L.S., March, 1934 & May, 1935

TABLE 13

OHIO

Average annual Earnings in Non-Manufacturing Industries;

1929 to 1933

Industry	1929			1930			1931			1932			1933		
	Average Annual Earnings	Wage Earners	Establishments	A.A.E. $	W.E.	E.	A.A.E. $	W.E.	E.	A.A.E $	W.E.	E.	A.A.E. $	W.E.	E.
Construction	$ 1,668	72,670	10,183	1,545	63,625	9,672	1,328	41,066	8,272	982	24,094	6,456	821	19,871	5,586
Service	1,180	100,805	9,335	1,123	99,427	10,241	1,066	97,184	10,452	939	91,523	10,357	797	83,190	10,215
Trade	1,281	56,971	9,524	1,259	57,845	10,022	1,217	55,482	10,111	1,064	49,087	9,716	970	48,049	9,647
Transportation & Public Utilities	1,406	66,862	1,674	1,402	68,358	1,741	1,343	54,303	1,776	1,199	47,021	1,742	1,149	48,222	1,692
Agriculture	957	8,437	1,444	937	8,471	1,639	804	8,706	1,777	650	7,528	1,736	574	7,311	1,683

TABLE 14

VIRGINIA: QUARRIES

Average Wages Per Hour,
By Occupation and Race,
1931

Occupation	Average Wage, Per Hour	
	White	Colored
Stone Quarries:		
Blacksmiths	$0.47	- -
Carpenters	.46	- -
Crusher plant men	.33	$0.31
Drillers	.36	.28
Drivers	.29	.32
Electricians	.47	- -
Engineers, firemen, brakemen, motormen, cranemen, shovel operators	.44	.34
Foremen	.58	.45
Laborers	.29	.29
Mechanics and machinists	.51	- -
Powder men	.40	.34
Power plant men	.34	- -
Rope men and signal boys	.30	- -
Other occupations	.33	.33
Slate Quarries:		
Blacksmiths	.54	- -
Carpenters	.30	- -
Crusher plant men	.35	.30
Drillers	.35	.28
Engineers, firemen, brakemen, motormen, cranemen, shovel operators	.45	.25
Foremen	.50	- -
Laborers	.25	.23
Machinists and mechanics	.45	- -
Powder men	.35	.25
Power plant men	.50	- -
Rope men and signal boys	.20	.23
Other occupations	.30	.20
Sand and gravel:		
Blacksmiths	.37	.40
Carpenters	.60	- -
Crusher plant men	.29	.35
Drillers	.26	.39

Virginia Quarries (2)

Occupation	Average Wage Per Hour	
	White	Colored
Engineers, firemen, brakemen, Motormen, cranemen, shovel operators	.53	.35
Foremen	.58	- -
Laborers	.30	.31
Machinists and mechanics	.47	.60
Powder men	.25	- -
Other occupations	.29	.30

Source: Monthly Labor Review, U.S. August, 1933

PART II

INDUSTRY TABLES

TABLE 15

AIR TRANSPORTATION INDUSTRY - GROUND PERSONNEL

Average Earnings by Sex
1931 - 1933

Sex	Average Earnings Per Hour		Average full-time Earnings Per Week		Average Actual Earnings Per Week		Employees		Local Units (a)	
	1931	1933	1931	1933	1931	1933	1931	1933	1931	1933
Male and Female	.640	.608	31.05	30.25	31.66	30.25	2,999	3,046	214	185
Male	.645	.613	31.26	30.47	31.89	30.55	2,911	2,947	214	185
Female	.497	.457	23.83	21.48	23.85	21.39	88	99	36	47

(a) Individual company forces of employees maintained at terminal airports.

Source: Monthly Labor Review March, 1934, U.S. BLS.

TABLE 16

ANTHRACITE COAL MINING: AVERAGE EARNINGS, BY OCCUPATION
1924-1931

Occupation	Average Earnings per hour (excluding time for lunch)		Average Earnings per half month		Wage Earners		Collieries	
	1924	1931	1924	1931	1924	1931	1924	1931
All occupations, inside and outside mine	$ .857	$ .824	$75.01	$70.36	49,500	42,689	56	47
All occupations, inside mine, including miners and miners' laborers	.965	.936	77.95	71.47	34,036	35,000	56	47
All occupations outside mine	.598	.612	65.45	65.28	10,464	7,689	56	47

Source: Monthly Labor Review April, 1932, U.S. Bls.

TABLE 17

AUTOMOBILE TIRE INDUSTRY

Average Annual Earnings; 1929 - 1931

Year	Average Annual Earnings	Wage-earners	Establishments
1929	$1,526	83,263	91
1931	1,290	48,341	54

SOURCE: "Monthly Labor Review", Bureau of Labor Statistics, U. S. Department of Labor, December 1932.

TABLE 18

BITUMINOUS COAL MINING, ALLEGHENY DISTRICT:

Average Earnings Per Half-Month, by Occupation; last Half of May, 1931, and a Typical Half-Month in 1929.

Occupation	Typical half-month in 1929	Last half May, 1931	Percent Decrease
Pick Mining	$ 52.91	$ 34.89	34.1
Cutting & Scraping	87.67	68.08	22.3
Motormen	65.79	50.25	23.6
Tracklayers	62.92	44.29	29.6
Drivers	57.89	42.22	27.1
Timbermen	64.66	42.39	34.4
Laborers, inside mine	51.56	35.91	30.4
Carpenters and car repairmen	59.10	43.26	26.8
Laborers, outside mine	46.95	29.92	36.3

Source: "Monthly Labor Review", U. S. B.L.S., December, 1931.

TABLE 19

BITUMINOUS COAL INDUSTRY

Trend of Average Earnings Per Hour,
by Occupation; 1929-1931-1933

Year	Mines	Miners and Loaders			Wage Earners Other Than Miners and Loaders	
		Wage Earners	Average Earnings per Hour Based on Time at Face	Average Earnings per Hour Based on Time in Mine	Wage Earners	Average Earnings Per Hour
1929	535	99,405	.687	.626	52,806	.605
1931	469	90,063	.599	.546	47,725	.595
1933	444	78,896	.395	.357	41,438	.439

Source: Monthly Labor Review, Bureau of Labor Statistics, U. S. Department of Labor, September, 1933.

TABLE 20

Bituminous Coal Mining: Earnings per hour, miners and non-miners: Number distribution: 1929-1933

Earnings per hour (a)	Miners (b)		Non-miners (c)	
	1929	1933	1929	1933
TOTAL	96,456	76,149	38,213	27,817
Under 30¢	3,689	25,438	591	4,157
30 and under 40¢	8,169	20,567	2,641	10,300
40 and under 50¢	13,591	11,867	6,504	5,585
50 and under 60¢	16,141	6,249	12,140	3,734
60 and under 70¢	14,855	6,873	6,520	3,942
70 and under 80¢	12,476	2,322	7,816	81
80 and under 90¢	9,437	1,731	1,684	13
90 and under $1.00	8,442	511	263	2
$1.00 and under $1.10	3,636	244	34	-
$1.10 and under $1.20	2,610	159	11	1
$1.20 and under $1.30	1,319	73	4	2
$1.30 and under $1.40	733	36	4	-
$1.40 and under $1.50	474	20	-	-
$1.50 and under $1.60	296	16	1	-
$1.60 and under $1.70	190	15	-	-
$1.70 and under $1.80	89	11	-	-
$1.80 and under $1.90	68	1	-	-
$1.90 and under $2.00	59	3	-	-
$2.00 and under $2.50	143	1	-	-
$2.50 and under $3.00	25	-	-	-
$3.00 and over	14	-	-	-

(a) Based on hours at face (at place of work in mine), including time for lunch, for miners and on time actually worked, exclusive of lunch time, for non-miners.
(b) Hand loaders, hand or pick miners, and machine miners (cutters).
(c) Brakemen, bratticemen, timbermen, drivers, laborers, motormen, and trackmen, in inside work and carpenters, car repairmen, and laborers, in outside work.

Source: Bulletins Nos. 516 and 601, BLS.

TABLE 21

Boot & Shoe Industry:
Trend of average earnings;
1928 - 1930 - 1932

Year	Average earnings per hour	Average full-time earnings per week	Wage-Earners	Establish-ments
1928	.530	26.02	48,658	157
1929	.510	24.94	55,158	161
1930	.412	20.15	49,666	164

TABLE 22

BUS TRANSPORTATION INDUSTRY

Average Earnings, by Sex
July 1933

SEX	Average Earnings Per Hour On Duty	Average Actual Earnings Per Week	Wage Earners
Males and Females	$ .533	$ 26.72	8,911
Males	.541	27.25	8,349
Females	.379	17.20	562

SOURCE: Monthly Labor Review U. S. BLS. June, 1934.

TABLE 23

CANE-SUGAR REFINING INDUSTRY

Earnings Per Hour, by Sex;
Percent Distribution; 1930

Earnings Per Hour	Percent Distribution		
	Male and Female	Male	Female
Total	100	100	100
8 and under 9 cents	*	*	-
11 and under 12 cents	*	-	1
12 and under 13 cents	*	*	*
13 and under 14 cents	1	1	7
14 and under 15 cents	*	*	-
15 and under 16 cents	2	2	*
16 and under 17 cents	1	1	1
17 and under 18 cents	1	1	-
18 and under 19 cents	2	2	*
19 and under 20 cents	*	*	1
20 and under 21 cents	1	1	9
21 and under 22 cents	1	1	*
22 and under 23 cents	2	1	13
23 and under 24 cents	*	*	-
24 and under 25 cents	*	*	5
25 and under 27½ cents	2	1	5
27½ and under 30 cents	2	2	9
30 and under 32½ cents	5	4	12
32½ and under 35 cents	3	3	7
35 and under 37½ cents	4	4	6
37½ and under 40 cents	3	3	7
40 and under 42½ cents	5	6	3
42½ and under 45 cents	3	3	4
45 and under 47½ cents	7	8	4
47½ and under 50 cents	5	5	3
50 and under 55 cents	25	27	*
55 and under 60 cents	7	8	*
60 and under 65 cents	7	7	*
65 and under 70 cents	3	3	-
70 and under 75 cents	2	2	-
75 and under 80 cents	1	1	-
80 and under 85 cents	2	2	-
85 and under 90 cents	1	1	-
90 and under 95 cents	*	*	-
95 and under 100 cents	*	*	-
100 and under 110 censt	*	*	-
110 and under 120 cents	*	*	-
140 and under 150 cents	*	*	-
170 and under 180 cents	*	*	-

* Less than 1 percent. Source: Monthly Labor Review U.S. BLS February, 1931

TABLE 24

CANE SUGAR REFINING INDUSTRY

Average Earnings, by Sex - 1930

Average Earnings	Males and Females	Males	Females
Average Earnings Per Hour	$ .461	$ .472	$ .289
Average Full-Time Weekly Earnings	27.06	27.99	14.88
Wage-Earners	11,890	11,027	863
Establishments	21	21	19

Source: Monthly Labor Review U. S. BLS., February, 1931

TABLE 25

AVERAGE EARNINGS PER HOUR

IN NEW ENGLAND and SOUTH ATLANTIC STATES

By Occupation and Sex - 1928-1930-1932-July 1933

COTTON GOODS MANUFACTURING

OCCUPATION and SEX	1928		1930		1932		JULY 1933	
	New England	So.Atlantic & Alabama	New England	So. Atl. & Ala.	New England	So. Atl. & Ala.	New England	So. Atlantic & Alabama
Males								
Loom fixers	60.0	39.9	58.5	42.0	49.6	35.5	46.3	32.3
Slasher Tenders	51.2	32.3	49.7	32.4	43.1	27.9	*	*
Warp-tying Machine Tenders	49.8	35.9	49.0	37.1	40.1	31.0	35.0	24.9
Card Grinders	49.4	35.8	47.8	36.2	38.5	31.4	34.2	27.1
Weavers	44.7	34.1	46.2	34.9	35.3	28.9	29.9	23.8
Slubber Tenders	46.8	31.7	46.6	32.1	37.5	26.4	30.8	21.1
Speeder Tenders	44.5	31.7	45.2	32.0	35.0	26.0	29.6	21.5
Card Tenders	40.5	26.0	40.2	26.4	32.8	21.8	28.8	19.1
Doffers	39.3	28.0	38.6	28.7	31.8	23.5	27.0	19.6
Picker Tenders	37.2	23.2	36.2	23.9	30.4	20.5	26.6	17.1
Drawing-frame Tenders	35.1	26.2	35.1	26.1	29.3	21.5	25.9	19.2
Females								
Weavers	41.8	30.8	42.6	31.9	33.1	27.3	28.0	21.5
Drawers-in, hand	40.3	29.7	40.6	29.8	32.0	24.0	33.6	23.0
Speeder Tenders	38.0	28.5	36.3	28.3	32.1	24.2	24.9	19.6
Harpers	37.7	27.1	36.0	28.6	29.8	22.9	28.4	19.4
Spinners, frame	35.9	22.8	34.9	22.5	27.7	18.5	23.6	16.2
Drawing frame Tenders	31.3	20.4	32.4	21.3	25.6	17.4	24.0	15.4
Creelers	28.6	22.1	29.0	23.3	24.9	19.2	24.6	15.8
Spooler Tenders	30.7	20.9	29.2	22.7	25.2	18.8	22.3	16.1
Trimmers or Inspectors	27.0	20.8	27.9	20.9	22.3	18.2	21.4	15.9

* Included under "weavers"

SOURCE: "M.L.R." - May, 1935, B.L.S.

TABLE 26

ELECTRIC RAILWAY AND MOTOR BUSSES

Average Annual Earnings in Occupations - 1927-1932

OCCUPATIONS	Average Annual Earnings		Percent of Change
	1927	1932	1927 to 1932
TOTAL	$1,610	$1,493	- 7.3
Conductors	1,7[illegible]	1,5[illegible]1	- [illegible].4
Motormen	1,7[illegible]	1,5[illegible]3	-1[illegible].3
Other Wage Earners	1,492	1,4[illegible]5	- 3.2

Source: Monthly Labor Review - U. S. B. L. S., February, 1933.

TABLE 27

FOUNDRIES

Average Earnings, by Sex; 1929-1931-1933

Sex	Average Earnings Per Hour			Average Full-time Earnings Per Week			Average Actual Earnings Per Week			Wage Earners			Establishments		
	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933
Males and Females	.624	.600	.482	31.82	30.18	23.81	30.39	20.06	14.25	40,391	28,699	19,763	399	388	364
Males	.625	.601	.483	31.88	30.23	23.86	30.50	20.13	14.28	40,032	28,469	19,619	399	388	364
Females	.451	.422	.314	22.41	20.55	15.17	19.08	12.40	9.51	359	230	144	41	34	31

SOURCE: Monthly Labor Review, Bureau of Labor Statistics, and Bulletin No. 522, Bureau of Labor Statistics, U. S. Department of Labor, December, 1933.

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TABLE 28

FURNITURE INDUSTRY

Average Earnings, by Sex; 1929-1931

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1929	1931	1929	1931	1929	1931	1929	1931	1929	1931
Males and Females	.490	.411	25.43	21.29	24.52	16.83	44,870	30,659	312	299
Males	.499	.416	26.00	21.59	25.12	17.22	41,912	28,876	312	299
Females	.345	.314	17.42	15.64	16.03	11.40	2,958	1,783	180	163

SOURCE: Bulletin No. 571, Bureau of Labor Statistics, U.S.Department of Labor.

TABLE 29

Furniture Manufacturing industry: Distribution of earnings per hour, 7 occupations, by sex; 1929 - 1931

Number

Earnings Per Hour	Males and females		Males		Females	
	1929	1931	1929	1931	1929	1931
TOTAL	24,027	17,013	22,169	15,820	1,858	1,193
Under 12¢	38	51	2	12	36	39
12¢, under 14¢	47	58	3	25	44	33
14¢, under 16¢	56	109	21	97	35	12
16¢, under 18¢	65	193	45	165	20	28
18¢, under 20¢	57	143	14	99	43	44
20¢, under 25¢	582	962	377	801	205	161
25¢, under 30¢	1,172	1,559	816	1,308	356	251
30¢, under 35¢	1,888	2,015	1,596	1,811	292	204
35¢, under 40¢	2,152	2,228	1,879	2,089	273	139
40¢, under 45¢	2,650	2,280	2,474	2,181	176	99
45¢, under 50¢	2,513	1,875	2,402	1,811	111	64
50¢, under 60¢	5,118	2,979	4,950	2,901	168	78
60¢, under 70¢	3,651	1,469	3,593	1,435	58	34
70¢, under 80¢	2,082	550	2,046	546	36	4
80¢, under 90¢	937	240	933	237	4	3
90¢, under $1.00	427	131	426	131	1	-
$1.00, Under $1.20	503	128	503	128	-	-
$1.20, under $1/40	65	31	65	31	-	-
$1.40, and over	24	12	4	12	-	-

Source: Bulletins Nos. 526 and 571, Bureau of Labor Statistics.

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TABLE 30

GASOLINE FILLING STATION INDUSTRY:

AVERAGE EARNINGS;

1931

Average Earnings per hour	.393
Average full-time earnings per week	23.58
Average Actual earnings per week	23.39
Wage Earners	2960
Establishments	736

Bulletin No. 578, U.S. BLS.

TABLE 31

GLASS INDUSTRY

Average Earnings, by Department of Industry, and by Sex, 1932

Department of Industry and Sex of Ware Earners	Average Earnings per Hour	Average Full-time Earnings Per Week	Average Actual Earnings Per Week	Ware Earners	Establishments
All Departments:					
Males and females	$ .454	$ 22.79	$ 17.61	26,971	120
Males	.490	24.65	18.30	23,023	120
Females	.289	12.43	7.45	3,948	83
Pressed and blown ware					
Males and females	.443	$ 21.85	$ 15.80	13,236	60
Males	.497	24.50	17.30	10,648	60
Females	.247	12.28	7.60	2,587	55
Bottles and food containers:					
Males and females	.440	22.26	17.83	8,683	47
Males	.469	23.73	19.48	7,365	44
Females	.254	12.80	9.24	1,324	26
Plate Glass					
Males and females	.482	24.63	15.61	2,997	6
Males	.485	24.78	15.72	2,961	6
Females	.262	12.58	6.54	36	2
Window Glass					
Males	.540	28.35	23.35	2,049	10

Source: Monthly Labor Review, October, 1933, U.S. BLS.

TABLE 32

GRAY-IRON FOUNDRY INDUSTRY

Average Wage Rates Per Hour, by Occupation; February, 1930; August, 1930, February, 1931 and October, 1931

Occupation	February 1930	August 1930	February 1931	October 1931
Molders:				
Bench	$ 0.814	$ 0.795	$ 0.753	$ 0.762
Floor	.830	.841	.819	.833
Loam	.780	.711	.782	.661
Machine	.746	.709	.665	.642
Coremakers:				
Men	.737	.714	.708	.692
Women	.439	.427	.419	.421
Patternmakers:				
Wood	.829	.847	.765	.752
Metal	.729	.767	.726	.690
Chippers	.533	.526	.519	.511
Common laborers	.484	.471	.474	.457

Source: Monthly Labor Review, December, 1931, U.S. BLS.

TABLE 33

HIGHWAY CONSTRUCTION

Average Wage Rates Per Hour on
Emergency and Non-emergency Projects,
by Occupation and Geographic Division;
August, 1933
Emergency Projects

Occupation	New England Division		Middle Atlantic Division		East North Central Division		West North Central Div.		South Atlantic Division	
	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate
Superintendents	57	$0.89	121	$0.96	263	$0.83	156	$0.79	189	$0.69
Foremen	261	.58	571	.60	903	.55	454	.56	716	.41
Shovel, elevating grader and crane operator.	105	.84	268	.81	459	.66	260	.63	215	.58
Other operators	91	.56	420	.53	656	.52	409	.52	375	.37
Truck and tractor drivers	727	.44	1,216	.49	2,969	.44	2,522	.46	1,947	.32
Teamsters	1	.44	75	.42	751	.39	943	.37	303	.23
Skilled labor	498	.53	668	.57	1,170	.52	505	.52	675	.35
Common Labor	2,358	.40	5,976	.39	12,589	.38	4,317	.37	7,006	.22

SOURCE: Monthly Labor Review, U.S. Bls. November, 1933

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HIGHWAY CONSTRUCTION

Average Wage Rates Per Hour on
Emergency and Non-emergency Projects
by Occupation and Geographic Division
August, 1933
Emergency Projects

	East South Central Div.		West South Central Div.		Mountain Division		Pacific Division		United States	
	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate
Superintendents	137	$0.97	151	$0.73	178	$0.97	136	$1.10	1,388	$0.84
Foremen	628	.40	515	.46	743	.70	557	.75	5,348	.55
Shovel, elevating grader, and crane operators	177	.56	161	.60	298	1.01	324	1.10	2,267	.75
Other operators	219	.33	275	.44	486	.67	438	.70	3,369	.52
Truck and tractor drivers	1,102	.28	1,087	.34	2,345	.61	1,695	.64	15,608	.46
Teamsters	511	.22	826	.28	1,482	.50	159	.54	5,051	.38
Skilled labor	806	.32	849	.42	833	.66	1,310	.68	7,314	.52
Common labor	6,311	.21	4,940	.27	3,922	.48	3,337	.50	50,756	.36

SOURCE: Monthly Labor Review, U.S. Dept., November, 1933.

HIGHWAY CONSTRUCTION

Average Wage Rates Per Hour on Emergency and Non-emergency Projects; by occupation and Geographical Division; August 1933

Nonemergency Federal and State Projects

Occupation	New England Division		Middle Atlantic Division		East North Central Division		West North Central Division		South Atlantic Division	
	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate
Superintendents	133	$0.86	162	$1.14	303	$0.92	172	$0.74	153	$0.62
Foremen	333	.59	448	.71	749	.62	478	.53	456	.40
Shovel, elevating grader and crane operators	175	.73	277	.87	439	.76	195	.59	108	.47
Other operators	149	.53	378	.54	532	.56	363	.50	124	.34
Truck and tractor drivers	577	.44	1,062	.45	2,416	.50	1,494	.47	526	.27
Teamsters	31	.45	26	.47	358	.44	716	.37	63	.26
Skilled labor	465	.54	1,056	.60	1,137	.60	522	.50	313	.33
Common labor	3,796	.37	4,311	.35	9,314	.42	3,858	.35	2,124	.23
Convicts	--	--	--	--	--	--	1	--	4,452	.10

Source: Monthly Labor Review, November, 1933, U. S. BLS.

HIGHWAY CONSTRUCTION

Average Wage Rates Per Hour on
Emergency and Non-emergency Projects;
by Occupation and Geographical Division;
August, 1933
Nonemergency Federal and State Projects

	East South Central Div.		West South Central Div.		Mountain Division		Pacific Division		United States	
	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate	Number of positions	Average hourly rate
Superintendents	91	$0.59	66	$0.77	32	$0.83	67	$1.19	1,179	$0.85
Foremen	258	.44	173	.52	72	.63	179	.80	3,146	.57
Shovel, elevating grader, and crane operators . .	121	.54	78	.55	51	.72	108	1.06	1,552	.71
Other operators	152	.32	141	.39	92	.56	161	.70	2,092	.50
Truck and tractor drivers	558	.28	493	.34	294	.50	552	.66	3,372	.44
Teamsters	761	.28	389	.30	155	.48	21	.57	2,520	.38
Skilled labor	530	.34	179	.38	116	.60	364	.73	4,682	.52
Common labor	2,807	.20	1,475	.28	581	.43	1,049	.50	29,315	.35
Convicts	145	—	246	—	65	—	226	.26	5,135	.15

SOURCE: Monthly Labor Review, U.S. Bls., November, 1933.

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TABLE 34

HOSIERY INDUSTRY

Average Earnings, by Sex; 1930-1932

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1930	1932	1930	1932	1930	1932	1930	1932	1930	1932
Males and Females	.497	.376	25.94	19.51	20.63	15.53	33,825	33,227	122	123
Males	.707	.[illegible]	37.05	25.79	31.[illegible]	21.80	12,137	12,[illegible]08	122	123
Females	.366	.[illegible]92	19.07	15.10	1[illegible].66	11.54	21,688	20,319	122	123

Source: Bulletin No. 591, Bureau of Labor Statistics, U. S. Department of Labor.

TABLE 35

Iron and Steel industry: Average earnings, by departments: 1929 - 1931 - 1933

Department	Average Earnings Per Hour			Average Full-Time Earnings Per Week			Average Actual Earnings Per Week			Wage Earners			Plants		
	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933
All departments	.674	.663	.485	36.48	34.58	24.98	-	-	11.71	71009	66865	53365	208	213	200
Blast furnaces	.528	.551	.444	32.05	31.52	24.46	-	-	12.77	12222	9825	6749	37	34	33
Steel works															
Bessemer Converters	.643	.664	.490	34.53	35.39	25.82	-	-	10.79	2251	1990	1331	11	11	8
Open-hearth furnaces	.714	.703	.513	41.20	37.82	27.34	-	-	11.39	13171	12795	11401	33	35	33
Rolling Mills															
Puddling mills	.686	.592	.474	34.51	31.38	25.03	-	-	14.46	1800	980	979	11	8	8
Blooming mills	.666	.664	.488	36.63	34.93	25.62	-	-	11.09	6266	5285	4514	30	33	32
Plate mills	.639	.627	.449	37.06	35.55	24.02	-	-	6.88	4024	4090	3835	17	17	17
Standard rail mills	.628	.613	.503	35.17	33.65	27.82	-	-	8.47	2816	2897	1648	7	8	6
Bar mills	.625	.588	.425	34.75	32.34	22.99	-	-	7.22	7475	7104	5781	39	43	42
Sheet mills	.793	.747	.473	38.78	35.71	22.18	-	-	11.22	12598	11816	8636	15	15	14
Tin-plate mills	.732	.714	.517	34.70	33.56	24.25	-	-	17.84	8386	10083	8491	8	9	7

SOURCE: Bulletins Nos. 513 and 567 and "Monthly Labor Review", September 1933, U. S. Bureau of Labor Statistics.

TABLE 56

IRON AND STEEL INDUSTRY

Earnings Per Hour, Male Laborers and all Wage-Earners: Number and Percent Distribution; 1937

Earnings Per Hour	Male Laborers		All Wage Earners	
	Number	Percent Distribution	Number	Percent Distribution
Total.....	5084	100	66,805	100
13 under 14 cents ...	- -	--	8	(1)
14 under 15 cents ...	- -	--	1	(1)
15 under 16 cents ...	- -	--	1	(1)
17 under 18 cents ...	2	(1)	8	(1)
18 under 19 cents ...	17	(1)	31	(1)
19 under 20 cents ...	1	(1)	12	(1)
20 under 21 cents ...	2	(1)	32	(1)
21 under 22 cents ...	- -	- -	29	(1)
22 under 23 cents ...	2	(1)	19	(1)
23 under 24 cents ...	35	1	112	(1)
24 under 25 cents ...	148	3	200	(1)
25 under 27 1/2cents.	41	1	288	(1)
27 1/2 under 30 cents	75	1	367	1
30 under 32 1/2 cents	168	3	655	1
32 1/2 under 35 cents	73	1	564	1
35 under 37 1/2 cents.	252	5	720	1
37 1/2 under 40 cents	87	2	1,034	2
40 under 42 1/2cents.	1,154	23	2,818	4
42 1/2 under 45cents.	1,561	31	3,201	5
45 under 47 1/2 cents	149	3	2,875	4
47 1/2 under 50 cents	154	3	2,443	4
50 under 55 cents ...	1,160	23	10,967	16
55 under 60 cents ...	- -	- -	7,209	11
60 under 65 cents ...	- -	- -	6,219	9
65 under 70 cents ...	- -	- -	5,093	8
70 under 75 cents ...	- -	- -	4,273	6
75 under 80 cents ...	- -	- -	3,301	5
80 under 85 cents ...	- -	- -	2,754	4
85 under 90 cents ...	- -	- -	2,158	3
90 under 95 cents ...	- -	- -	1,530	2
95 under $1.	- -	- -	1,226	2
$1 under $1.10	- -	- -	2,110	3
$1.10 under $1.20 ...	- -	- -	1,385	2
$1.20 under $1.30 ...	- -	- -	803	1
$1.30 under $1.40 ...	- -	- -	525	1
$1.40 under $1.50 ...	- -	- -	386	1

Earnings Per Hour	Male Laborers		All Wage Earners	
	Number	Percent Distribution	Number	Percent Distribution
$1.50 under $1.60 ..	- -	- -	357	1
$1.60 under $1.70 ..	- -	- -	284	(1)
$1.70 under $1.80 ..	- -	- -	218	(1)
$1.80 under $1.90 ..	- -	- -	153	(1)
$1.90 under $2	- -	- -	129	(1)
$2 under $2.25	- -	- -	216	(1)
$2.25 under $2.50 ..	- -	- -	72	(1)
$2.50 under $2.75 ..	- -	- -	37	(1)
$2.75 under $3	- -	- -	15	(1)
$3 . under $3.25 ...	- -	- -	13	(1)
$3.50 under $3.75 ..	- -	- -	2	(1)
$3.75 under $4	- -	- -	1	(1)

(1) Less than 1 per cent.

Source : Bulletin No. 567, U. S. Bureau of Labor Statistics

TABLE 37

LAUNDRIES:

NEW HAMPSHIRE :

Average Wage Rates and Earnings of Women and Minors, by type of Laundry June, 1933

Type of Laundry	Average Wage Rates Per Hour	Average full-time Earnings Per Week	Average Actual Earnings Per Week
Commercial	$ .269	$ 11.41	$ 8.93
General	.360	12.10	9.54
Wet Wash and rough dry	.285	9.50	7.93
Miscellaneous (including hand and home laundries).	.230	7.66	6.41
Institutional (including hospitals, schools, and endowed homes).....	.235	8.99	9.33

Source: Monthly Labor Review U. S. BLS. June, 1934.

TABLE 38

LEATHER INDUSTRY

Average Earnings, by Sex; 1952

Sex	Average Earnings Per Hour	Average Full-time Earnings Per Week	Average Actual Earnings Per Week	Wage Earners	Establishments
Males and Females	.471	23.74	19.74	21,399	114
Males	.493	24.85	20.78	18,755	114
Females	.303	15.15	12.41	2,644	57

Source: Bulletin No. 589, Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 39

MACHINE SHOPS

Average Earnings, by Sex; 1929-1931-1933

Sex	Average Earnings Per Hour			Average Full-time Earnings Per Week			Average Actual Earnings Per Week			Wage Earners			Establishments		
	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933	1929	1931	1933
Males and Females	.638	.634	.540	32.09	31.57	26.19	32.06	24.22	18.71	91,491	65,938	41,960	508	512	492
Males	.641	.637	.545	32.24	31.72	26.43	32.30	24.36	18.87	89,935	64,921	41,003	508	512	492
Females	.393	.408	.351	19.67	20.07	16.64	18.41	15.85	11.98	1,556	1,017	957	56	49	48

SOURCE: Monthly Labor Review, December, 1933, and Bulletin No. 522, Bureau of Labor Statistics, U. S. Department of Labor.

TABLE 40

METALLIFEROUS MINING INDUSTRY:

AVERAGE EARNINGS; 1924 -1931

	1924	1931
Average earnings per hour	.559	.559
Average full-time earnings per week	20.63	28.84
Wage earners	38,196	32,195
Mines	137	139

Source : Bulletin No. 573 - U.S. B.L.S.

TABLE 41

MEN'S CLOTHING INDUSTRY

Average Earnings, by Sex; 1930-1932

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1930	1932	1930	1932	1930	1932	1930	1932	1930	1932
Males and Females	.701	.506	31.05	22.47	26.48	18.87	33,404	33,051	212	243
Males	.385	.641	39.21	23.40	34.84	24.75	16,571	16,511	212	242
Females	.504	.361	22.23	16.06	18.24	13.01	16,833	16,540	211	233

SOURCE: Bulletin No. 594, Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 42

MOTOR TRUCK TRANSPORTATION INDUSTRY:

Average Earnings, by Sex;
July, 1933

SEX	Average Earnings Per Hour On Duty	Average Actual Earnings Per Week	Wage Earners
Males and Females.....	$ .452	$ 22.73	7,129
Males	.457	23.16	6,729
Females	.367	16.43	400

SOURCE: "Monthly Labor Review" Bureau of Labor Statistics, U. S. Department of Labor, June, 1934.

TABLE 43

MOTOR VEHICLE MANUFACTURING INDUSTRY

Average Earnings, by Sex; 1923 - 1930 - 1932

Average Earnings	Males and Females			Males			Females		
	1923	1930	1932	1923	1930	1932	1923	1930	1932
Average earnings per hour	.750	.724	.623	-	.733	.638	-	.436	.361
Average full time earnings per week	37.05	35.33	30.40	-	35.70	30.82	-	22.06	18.23
Average actual earnings per week	-	25.01	20.00	-	25.40	20.36	-	13.36	11.09
Wage earners	153,962	134,912	114,242	-	130,433	109,799	-	4,479	4,443
Establishments	94	96	93	-	96	93	-	57	52

SOURCE: "Monthly Labor Review" U. S. B.L.S. June, 1933

TABLE 44

MOTOR VEHICLE REPAIR GARAGE INDUSTRY

AVERAGE EARNINGS;

1931

Average earnings per hour	.579
Average full-time earnings per week	30.92
Average actual earnings per week	29.56
Wage earners	6,053
Garages	344

Bulletin No. 578 - U.S. B.L.S.

TABLE 45

AVERAGE EARNINGS PER HOUR

By Sex and Kind of Ware

POTTERY INDUSTRY - 1925-1932

Average earnings and hours; wage-earners and establishments	Semi-vitreous POTTERY WARE						Vitreous POTTERY WARE					
	Males and Females		Males		Females		Males and Females		Males		Females	
	1925	1932	1925	1932	1925	1932	1925	1932	1925	1932	1925	1932
Average earnings per hour	$.596	$.450	$.705	$.535	$.385	$.292	$.521	$.438	$.638	$.546	$.329	$.264
Average number of hours worked per day	8.0	7.7	8.1	7.7	7.8	7.7	8.0	7.2	8.2	7.2	7.7	7.2
Wage-earners	10,323	6,467	6,666	4,086	3,657	2,381	2,684	2,419	1,619	1,429	1,065	990
Establishments	46	27	46	27	46	27	7	12	7	12	7	12

SOURCE: Monthly Labor Review U. S. B.L.S. April, 1933

TABLE 46

PORTLAND CEMENT INDUSTRY: AVERAGE EARNINGS, BY SEX; 1929 - 1932

Average Earnings	Males and Females		Males		Females	
	1929	1932	1929	1932	1929	1932
Average earnings per hour	.517	.401	.518	.401	.389	.386
Average full-time earnings per week	31.43	23.66	31.49	23.70	20.23	18.76
Average actual earnings per week	29.25	18.35	29.33	18.39	18.12	10.52
Wage earners	20,701	13,677	20,544	13,609	157	68
Establishments	102	103	102	103	28	18

"Monthly Labor Review", U. S. B. L. S., March 1933.

TABLE 47

PETROLEUM INDUSTRY, PIPE-LINE MACH: AVERAGE WAGE RATES PER HOUR, BY OCCUPATION; May, 1929 - May, 1933

Occupation	Average wage rates per hour	
	May, 1929	May, 1933
Engineers	.722	.693
Firemen	.697	.618
Gagers	.701	.681
Laborers	.418	.390
Line Walkers	.614	.609
Oilers	.659	.662
Roustabouts	.688	.605
Telegraphers	.710	.690
Truck drivers	.563	.658

Source: "Monthly Labor Review", U.S. B.L.S. September, 1935

TABLE 48

RAILROADS

Average Annual Earnings of All Employees, excluding executives; 1929-1931-1932-1933

Year	Average Annual Earnings
1929	$ 1,627
1931	1,575
1932	1,470
1933	1,245

SOURCE: "Monthly Labor Review, Bureau of Labor Statistics, U.S. Department of Labor, July, 1935.

TABLE 49

RAILROADS

Earnings Per Week Up to $21.94 -
Number Distribution, November 1933

Earnings Per Week	Employees	Cumulative Percent of Total Employment
Total	154,692	15.3
$6.48 and under	8,758	0.9
Over $6.48, to $8.64	20,415	2.9
Over $8.64, to $10.80	34,881	6.4
Over $10.80, to $12.96	50,306	11.4
Over $12.96, to $15.12	35,774	14.9
Over $15.12, to $21.94	4,558	15.3

Source: "Monthly Labor Review", U. S. BLS., September, 1935.

TABLE 50

RAYON AND OTHER SYNTHETIC YARN MANUFACTURING

Average Earnings, by Sex; 1930-1932

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1930	1932	1930	1932	1930	1932	1930	1932	1930	1932
Males and Females	.441	.359	22.14	17.30	19.76	16.64	32,292	25,326	21	20
Males	.504	.408	25.75	19.83	23.53	19.51	18,743	14,869	21	20
Females	.344	.283	16.86	13.47	14.55	12.55	13,549	10,457	21	20

SOURCE: Monthly Labor Review. U.S.B.L.S., March, 1933.

TABLE 51

SHIPPING, AMERICAN STEAM AND MOTOR CARGO VESSELS OF 5000 GROSS TONS AND OVER;

Average Monthly Wage Rates, by Position;
January 1, 1929, January 1, 1930, January 1, 1931,
January 1, 1932, and January 1, 1933

Position	Private					United States Shipping Board				
	1929	1930	1931	1932	1933	1929	1930	1931	1932	1933
Deck department:										
First mate	$182	$180	$180	$174	$164	$185	$185	$185	$185	$172
Second mate	160	159	158	150	144	165	165	165	162	154
Third mate	143	144	143	134	127	150	149	150	147	140
Fourth mate	121	121	120	110	98	128	120	127	128	105
Boatswain	74	74	74	69	64	75	75	74	74	68
Carpenter	68	77	77	73	66	80	80	79	76	72
Seaman, able	64	61	60	56	52	62	62	63	61	58
Seaman, ordinary	45	45	45	41	38	47	47	47	46	43
Engineer department:										
Chief engineer	280	278	280	262	256	261	261	265	261	250
First assistant engineer	183	182	183	175	165	187	187	188	185	173
Second assistant engineer	161	161	161	151	144	168	167	168	164	155
Third assistant engineer	145	145	145	137	128	152	151	154	149	140
Fireman	63	64	63	59	54	65	66	66	65	60
Oiler	71	70	70	67	61	72	72	72	72	67
Water tender	71	70	71	66	59	72	72	72	72	65
Coal passer or wiper	55	55	53	49	45	58	58	59	55	53
Radio operators (Class I): Grade I	---	100	100	96	91	---	105	105	103	94
Steward department:										
Chief steward	122	123	120	116	111	121	121	120	120	116
Second steward	103	97	97	94	86	100	90	95	97	88
Cook	100	100	99	95	92	100	100	95	99	111
Second cook	81	81	77	72	69	80	80	80	79	73
Mess steward	49	49	48	40	40	51	47	47	46	43
Mess boy	42	42	43	39	36	43	42	43	41	39

SOURCE: "Monthly Labor Review", March, 1932 and February, 1934, Bureau of Labor Statistics.

TABLE 52

SILK AND RAYON INDUSTRY: EARNINGS PER HOUR, BY SEX AND REGION: NUMBER DISTRIBUTION; AUGUST, 1933

Earnings per hour	All Four Regions			South			Middle Atlantic			Paterson			New England		
	Males and females	Males	Females	Males and females	Males	Females	Males and females	Males	Females	Males and females	Males	Females	Males and females	Males	Females
Total	23,723	10,685	13,038	2,682	1,512	1,170	11,799	5,128	6,671	3,016	1,030	986	7,226	3,015	4,211
Less than 22½¢	1,136	512	624	241	100	141	669	333	336	68	28	40	158	51	107
22½¢ and less than 27½¢	717	249	468	131	46	85	401	132	269	58	25	33	127	46	81
27½¢ " " " 30 ¢	267	117	150	65	31	34	124	59	65	13	6	7	65	21	44
30 ¢ " " " 32½¢	919	420	499	535	239	296	259	128	131	38	18	20	87	35	52
32½¢ " " " 35 ¢	6,625	1,484	5,141	241	98	143	4,315	891	3,424	544	78	466	1,525	417	1,108
35 ¢ " " " 40 ¢	3,985	1,337	2,648	400	184	216	1,940	602	1,338	271	113	158	1,374	438	936
40¢ " " " 45 ¢	2,899	1,569	1,330	359	232	127	1,405	883	522	211	115	96	924	339	585
45 ¢ " " " 50 ¢	2,091	1,221	870	257	187	70	726	501	225	248	188	60	860	345	515
50 ¢ " " " 60 ¢	2,606	1,724	882	262	214	48	996	766	230	275	199	76	1,073	545	528
60 ¢ " " " 70 ¢	1,377	1,066	311	146	137	9	569	469	100	118	95	23	544	365	179
70 ¢ and over	1,101	986	115	45	44	1	395	364	31	172	165	7	489	413	76

SOURCE: Monthly Labor Review, U.S.BLS., June, 1935.

TABLE 59

SILK AND RAYON GOODS INDUSTRY

Average Earnings, by Sex; 1931-1933

Average Earnings	Males and Females		Males		Females	
	1931	1933	1931	1933	1931	1933
Average Earnings per Hour	.406	.269	.485	.319	.335	.221
Average Full-time Earnings Per Week	20.58	13.69	24.98	16.46	16.75	11.09
Average Actual Earnings per Week	18.47	11.85	23.45	14.82	14.46	9.24
Wage-earners	49,036	41,713	21,885	19,500	27,151	22,213
Establishments	340	291	340	291	340	291

SOURCE: "Monthly Labor Review", Bureau of Labor Statistics, U. S. Department of Labor, November, 1933.

TABLE 54

SLAUGHTERING AND MEAT-PACKING INDUSTRY: AVERAGE EARNINGS, BY SEX:

1929 - 1931

Sex	Average earnings per hour		Average full-time earnings per week		Average actual earnings per week		Wage Earners		Establishments	
	1929	1931	1929	1931	1929	1931	1929	1931	1929	1931
Males and females	.504	.449	24.80	22.09	24.18	20.38	61,599	53,555	90	90
Males	.525	.470	25.88	23.12	25.47	21.57	52,796	45,523	90	90
Females	.369	.321	18.04	15.70	16.54	13.61	8,803	8,032	83	82

SOURCE: Bulletin No. 576 - U.S.B.L.S.

TABLE 55

TEXTILE DYEING AND FINISHING INDUSTRY

Average Earnings, by Sex; 1930-1932

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1930	1932	1930	1932	1930	1932	1930	1932	1930	1932
Males and Females	.452	.400	23.01	20.52	22.29	19.99	21,482	19,246	109	93
Males	.473	.418	24.12	21.49	23.99	21.37	17,739	16,205	109	93
Females	.335	.291	16.92	14.90	14.20	12.65	3,743	3,041	84	81

SOURCE: Bulletin No. 588, Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 56

UNDERWEAR INDUSTRY

Average Earnings, by Sex; 1930-1932

Sex	Average Earnings Per Hour		Average Full-time Earnings Per Week		Average Actual Earnings Per Week		Wage Earners		Establishments	
	1930	1932	1930	1932	1930	1932	1930	1932	1930	1932
Males and Females	.357	.292	17.96	14.80	14.50	11.08	15,155	11,738	74	76
Males	.458	.408	23.31	20.85	20.65	17.72	2,910	2,174	74	76
Females	.330	.260	16.57	13.16	13.04	9.56	12,245	9,564	74	76

SOURCE: Bulletin No. 591, Bureau of Labor Statistics, U. S. Department of Labor.

TABLE 57

CONNECTICUT: WOMEN'S DRESS INDUSTRY

Earnings Per Week; Number and Percent Distribution; 2 Selected Weeks, 1933

Earnings Per Week	Week in Busy Season		Week in Slack Season	
	Number	Percent Distribution	Number	Percent Distribution
Total	1,800	100.00	1,221	100.00
Under $5	242	13.80	552	44.8
$5 and under $10	635	35.09	525	43.1
$10 and under $15	618	34.18	121	10.0
$15 and under $20	230	12.73	15	1.4
$20 and over/	75	4.20	8	.7

SOURCE: Monthly Labor Review, U.S.D.L.S., April 1935

TABLE 58

WOOLEN AND WORSTED GOODS INDUSTRY:

Average Earnings, by Sex:

1928 - 1930 - 1932

	Males and Females			Males			Females		
	1928	1930	1932	1928	1930	1932	1928	1930	1932
Average Earnings per hour	.514	.460	.394	.568	.516	.447	.438	.392	.327
Average fulltime earnings per week	25.34	22.82	19.82	28.06	25.65	22.62	21.55	19.40	16.35
Average actual earnings per week	--	18.73	16.13	--	21.97	19.26	--	15.19	12.59
Wage Earners	38,850	41,400	38,509	21,049	21,591	20,407	17,801	19,809	18,102
Establishments	92	105	91	92	105	91	92	105	90

SOURCE: Bulletins Nos. 487, 533, and 584, U.S.BLS.

TABLE 59

WOOLEN AND WORSTED GOODS MANUFACTURING INDUSTRY:
EARNINGS PER HOUR, BY SEX: NUMBER AND PERCENT DISTRIBUTION; 1930-1932

Earnings Per Hour	1930 Number			1930 Percent Distribution			1932 Number			1932 Percent Distribution		
	Males and Females	Males	Females	Males and Females	Males	Females	Males and Females	Males	Females	Males and Females	Males	Females
Total	41,420	21,591	19,829	100	100	100	38,509	20,407	18,102	100	100	100
4 and under 5 cents	-	-	-	-	-	-	1	-	1	*	-	*
5 and under 6 cents	4	-	4	*	-	*	-	-	-	-	-	-
6 and under 7 cents	6	3	3	*	*	*	7	1	6	*	*	*
7 and under 8 cents	6	1	5	*	*	*	10	2	8	*	*	*
8 and under 9 cents	11	1	10	*	*	*	15	1	14	*	*	*
9 and under 10 cents	12	2	10	*	*	*	25	2	23	*	*	*
10 and under 11 cents	17	7	10	*	*	*	31	5	26	*	*	*
11 and under 12 cents	41	10	31	*	*	*	46	7	39	*	*	*
12 and under 13 cents	34	7	27	*	*	*	57	7	50	*	*	*
13 and under 14 cents	29	4	25	*	*	*	80	17	63	*	*	*
14 and under 15 cents	52	7	45	*	*	*	109	30	79	*	*	*
15 and under 16 cents	91	19	72	*	*	*	216	54	162	1	*	1
16 and under 17 cents	47	16	31	*	*	*	128	44	84	*	*	*
17 and under 18 cents	108	24	84	*	*	*	246	55	191	1	*	1
18 and under 19 cents	110	34	76	*	*	*	182	36	146	*	*	1
19 and under 20 cents	90	10	80	*	*	*	391	76	315	1	*	2
20 and under 21 cents	351	104	247	1	*	1	545	110	435	1	1	2
21 and under 22 cents	201	51	150	*	*	1	499	87	412	1	*	2
22 and under 23 cents	266	76	190	1	*	1	621	102	519	2	*	3
23 and under 24 cents	383	36	347	1	*	2	531	91	440	1	*	2
24 and under 25 cents	464	111	353	1	1	2	859	131	728	2	1	4
25 and under 27½ cents	1,381	384	997	3	2	5	2,526	671	1,855	7	3	10
27½ and under 30 cents	1,894	398	1,496	5	2	7	2,739	620	2,119	7	3	12
30 and under 32½ cents	2,753	543	2,210	7	3	11	3,239	1,378	1,861	8	7	10
32½ and under 35 cents	2,329	626	1,703	6	3	9	3,703	1,443	2,260	10	7	12
35 and under 37½ cents	3,050	963	2,087	7	4	11	3,755	2,073	1,682	10	10	9

TABLE 59

WOOLEN AND WORSTED GOODS MANUFACTURING INDUSTRY:
EARNINGS PER HOUR, BY SEX: NUMBER AND PERCENT DISTRIBUTION; 1930-1932

Earnings Per Hour	1930 Number			1930 Percent Distribution			1932 Number			1932 Percent Distribution		
	Males and Females	Males	Females	Males and Females	Males	Females	Males and Females	Males	Females	Males and Females	Males	Females
37½ and under 40 cents	3,462	1,532	1,930	8	7	10	3,356	2,191	1,165	9	11	6
40 and under 42½ cents	3,876	2,564	1,312	9	12	7	2,577	1,529	1,048	7	7	6
42½ and under 45 cents	2,822	1,875	947	7	9	5	1,517	956	561	4	5	3
45 and under 47½ cents	2,578	1,309	1,269	6	6	6	1,663	1,253	410	4	6	2
47½ and under 50 cents	1,716	1,042	674	4	5	3	1,154	860	294	3	4	2
50 and under 55 cents	2,690	1,681	1,009	6	8	5	2,373	1,827	546	6	9	3
55 and under 60 cents	2,461	1,736	725	6	8	4	1,731	1,467	264	4	7	1
60 and under 65 cents	2,204	1,659	545	5	8	3	1,467	1,307	160	4	6	1
65 and under 70 cents	1,677	1,290	387	4	6	2	970	916	54	3	4	*
70 and under 75 cents	1,467	1,186	281	4	5	1	557	532	25	1	3	*
75 and under 80 cents	997	796	201	2	4	1	260	241	19	1	1	*
80 and under 85 cents	774	665	109	2	3	1	150	140	10	*	1	*
85 and under 90 cents	409	348	61	1	2	*	79	71	8	*	*	*
90 and under 95 cents	294	248	46	1	1	*	43	39	4	*	*	*
95 cents and under $1.00	108	87	21	*	*	*	12	7	5	*	*	*
$1.00 and under $1.10	97	81	16	*	*	*	20	19	1	*	*	*
$1.10 and under $1.20	30	30	-	*	*	-	7	3	4	*	*	*
$1.20 and under $1.30	13	11	2	*	*	*	6	4	2	*	*	*
$1.30 and under $1.40	5	5	-	*	*	-	5	2	3	*	*	*
$1.40 and under $1.50	2	2	-	*	*	-	-	-	-	-	-	-
$1.50 and under $1.60	3	2	1	*	*	*	-	-	-	-	-	-
$1.60 and under $1.70	2	2	-	*	*	-	-	-	-	-	-	-
$1.70 and under $1.80	-	-	-	-	-	-	-	-	-	-	-	-
$1.80 and under $1.90	1	1	-	*	*	-	-	-	-	-	-	-
$1.90 and under $2.00	1	1	-	*	*	-	1	-	1	*	-	*
$2.00 and under $2.25	1	1	-	*	*	-	-	-	-	-	-	-

*Less than 1 per cent.
Source: Bulletin No. 584 U. S. B. L. S.

TABLE 60

HOURLY WAGE RATES OF FEMALE EMPLOYES SHORTLY BEFORE ADOPTION OF CODES UNDER THE NATIONAL INDUSTRIAL RECOVERY ACT in State of Minnesota

Shown by Industry and Number of Employes in Each Group

Classification of Industry	Total Number Employes	HOURLY WAGE RATE GROUPS— 1 to 10 Cts.	10 to 20 Cts.	20 to 30 Cts.	30 to 40 Cts.	40 to 50 Cts.	50 to 60 Cts.	60 to 70 Cts.	70 to 80 Cts.	80 to 90 Cts.	90 to $1.00	$1.00 to $1.10	$1.10 to $1.20	$1.20 to $1.30	$1.30 and Over
All industries	24,190	13	1,741	10,854	6,631	2,942	1,060	461	244	109	44	31	11	10	39
Stone products	147		21	94	23	4	4		1						
Glass products	29		1	8	9	8	2				1				
Metal products	273		22	111	91	35	7	4	3						
Foundries	48		1	29	13		2		2		1				
Machinery and instruments	605		9	119	344	91	22	7	4	2	5				2
Agricultural machinery and implements	8			4	3		1								
Vehicle	2			1		1									
Planing mills	28		1	7	14	3		1	2						
Woodworking	346		65	191	47	25	11	5	1						1
Leather and fur	71			11	11	27	18	3		1					
Boots and shoes	219		47	120	40	12									
Rubber and composition goods	5			4		1									
Chemicals and allied products	612		11	258	212	69	33	9	6	7	1	1	4		1
Paper and paper products	510	3	58	225	160	34	15	2	2		6				5
Printing and publishing	1,167		46	366	364	184	91	72	227	9	4	1	2		1
Textiles	911		46	233	266	176	123	26	20	7	6	2		4	5
Clothing and furnishings	996		16	145	150	183	182	108	110	43	10	18		3	19
Launderers, cleaners and dyers	2,204	2	336	1,420	379	48	11	3	2						
Flour and grist mills	251			27	57	96	31	25	9	7	1	1			
Bakery	821		23	494	214	44	26	2	3	4	1	1	2	3	4
Dairy products	487	1	46	210	111	69	32	11	4	1	1	1			
Slaughtering and meat packing	671		64	365	184	40	15	1	1		1				
Brewing and bottling	88		42	6	15	16	8	1							
Other food products	1,109	1	111	733	170	57	15	8	1	2	1		1		
Miscellaneous manufacturing	87		4	45	27	11									
Finishing, equipping and installing	16			5	6	3	1	1							
Electric railways	81			3	40	20	10	5	3						
Garage	1						1								
Cartage and storage	40		1	11	10	4	5	8				1			
Telephone and telegraph	1,695		2	56	592	881	114	37	11	2	1				
Public utilities	8			4	3		1								
Stores	9,501	3	613	4,937	2,851	710	219	108	26	23	3	5	2		1
Yards (not otherwise classified)	3					3									
Domestic service	640	1	95	337	145	21	34	4	1	1	1				
Personal service	261	2	26	101	49	49	22	7	5						
Professional service	251		34	178	21	14	2	2							

Source: 24th Biennial Report of Industrial Commission of Minnesota

TABLE 61

HOURLY WAGE RATES OF MALE EMPLOYES SHORTLY BEFORE ADOPTION OF CODES UNDER THE NATIONAL INDUSTRIAL RECOVERY ACT IN STATE OF MINNESOTA

Shown by Industry and Number of Employes in Each Group

Classification of Industry	Total Number Employes	HOURLY WAGE RATE GROUPS- 1 to 10 Cts.	10 to 20 Cts.	20 to 30 Cts.	30 to 40 Cts.	40 to 50 Cts.	50 to 60 Cts.	60 to 70 Cts.	70 to 80 Cts.	80 to 90 Cts.	90 to $1.00	$1.00 to $1.10	$1.10 to $1.20	$1.20 to $1.30	$1.30 and Over
All industries	44,733	263	1,833	6,546	10,227	10,471	7,012	3,439	1,895	1,149	434	365	187	175	517
Stone products	649	.	5	133	119	209	61	23	18	10	14	20	4	24	9
Glass products	194		4	12	25	44	45	28	20	7	4	2	1	2	...
Metal products	1,471		22	180	433	463	183	87	50	25	8	7	3	5	5
Foundries	677		2	29	192	192	145	53	38	10	7	3	1	2	3
Machinery and instruments	2,297		13	134	448	527	535	296	154	75	38	19	15	9	34
Agricultural machinery and implements	84	...	2	3	5	8	7	1	7	1	...	...	...	...	...
Vehicles	103	.		1	22	39	24	13	2	1		1	...	...	
Planing mills	406		6	48	164	104	50	8	5	4	6	3	2	...	6
Woodworking	2,034		57	343	683	556	228	88	52	36	14	3	3	4	7
Leather and fur	247		8	112	47	25	16	14	6	8	7	2	3	...	...
Boots and shoes	291	.	24	134	46	60	15	7	5	...	...	...	...	...	...
Rubber and composition goods	28	.		1	12	12	1	1		1					
Chemicals and allied products	1,504	.	2	72	454	374	241	100	80	43	44	21	15	23	35
Paper and paper products	1,187		14	125	406	250	135	84	72	28	20	12	5	11	25
Printing and publishing	2,439		7	346	428	326	262	246	226	189	89	89	37	23	171
Textiles	2,310	31	528	1,196	439	89	17	7		2	.	...	...	.	1
Clothing and furnishings	3,153	185	698	1,052	764	316	94	30	7	2	1	2	.	.	2
Launderers, cleaners and dyers	1,138	1	17	191	328	296	145	80	35	24	14	4	2	1	.
Flour and grist mills	1,679		1	20	288	618	361	244	75	38	19	8	1	...	6
Bakeries	1,597		7	169	487	409	322	106	45	17	16	6	1	2	10
Dairy products	1,904	27		119	183	181	148	762	333	84	27	20	6	5	9
Slaughtering and meat packing	4,067		1	106	1,430	1,320	601	262	128	75	57	26	17	9	35
Brewing and bottling	1,380	12	11	24	99	559	305	158	92	33	28	21	7	9	22
Other food products	1,836		14	692	478	249	156	111	51	32	17	11	6	3	16
Miscellaneous manufacturing	167		8	28	32	42	28	15	6	3	3	...	1	1	.
Finishing, equipping and installing	170		6	35	26	27	13	6	23	4	.	19	6	1	4
Electric railways	2,589		2	22	228	374	1,864	40	16	9	6	3	4	11	10
Bus and truck lines	103				1	102									
Garages	10					2	1	4	3						
Cartage and storage	137		1	15	16	60	27	9	5	1	1	1	1		
Telephone and telegraph	1,469	2	230	30	100	182	189	142	140	261	115	22	14	12	30
Public utilities	15				2	4	6	1			2				
Stores	6,789		69	971	1,771	2,361	673	392	186	186	74	37	29	17	73
Yards (not otherwise classified)	62			7	4		44	3	2	1	...	1	...	...	...
Lumber yards	33					14	15	3		1	...	...	...	...	...
Domestic service	389	5	71	167	57	39	24	8	6	6	2	3	1	...	...
Personal service	67	.	3	10	8	12	18	5	4	1	1	...	1	...	4
Professional service	108			19	52	16	14	2	3	1	...	..	...	1	...

Source: 24th Biennial Report of Industrial Commission of Minnesota

TABLE 62

WEEKLY EARNINGS OF FEMALE EMPLOYES SHORTLY BEFORE ADOPTION OF CODES UNDER THE NATIONAL INDUSTRIAL RECOVERY ACT IN STATE OF MINNESOTA

Shown by Industry and Number of Employes in Each Group

Classification of Industry	Total Number Employes	WEEKLY EARNINGS $1 to $6	$6 to $11	$11 to $16	$16 to $21	$21 to $26	$26 to $31	$31 to $36	$36 to $41	$41 to $46	$46 to $51	$51 to $101	$101 and Over
All industries	**24,190**	**1,599**	**4,767**	**10,685**	**4,672**	**1,392**	**571**	**274**	**103**	**37**	**25**	**60**	**5**
Stone products	147	5	15	97	17	9	1	3	...	...	...	...	...
Glass products	29		1	8	15	3	1			1			
Metal products	273	14	54	109	65	22	6	3					
Foundries	48	6	16	14	7	4		1					
Machinery and instruments	605	10	96	338	113	33	8	3	2			2	
Agricultural machinery and implements	8			5	2	1							
Vehicles	2	1			1								
Planing mills	28	1	5	4	15	2		1					
Woodworking	346	35	107	129	52	16	7						
Leather and fur	71	1	2	19	17	28	3		1				
Boots and shoes	219	22	71	117	2	6							1
Rubber and composition goods	5			4		1							
Chemicals and allied products	612	28	88	289	117	53	18	5	7	2	2	3	
Paper and paper products	510	52	158	217	48	21	1	5	1	2		5	
Printing and publishing	1,167	24	183	498	251	111	66	22	6	5		1	
Textiles	914	20	83	286	243	135	87	31	14	10	1	4	
Clothing and furnishings	996	11	61	194	203	183	152	102	37	9	16	25	3
Launderers, cleaners and dyers	2,204	94	843	1,061	174	18	11	3					
Flour and grist mills	254	7	8	53	85	63	21	11	5		1		
Bakeries	821	55	142	481	88	33	4	2	4	1	2	9	
Dairy products	487	36	139	139	111	40	17	3		2			
Slaughtering and meat packing	671	21	150	336	142	16	4	1	1				
Brewing and bottling	88	19	24	11	15	15	3					1	
Other food products	1,100	148	435	378	94	32	8	1	4				
Miscellaneous manufacturing	87	1	23	38	19	5	1						
Finishing, equipping and installing	16			7	6	2	1						
Electric railways	81	2		20	41	10	5	3					
Garages	1						1						
Cartage and storage	40	6	8	7	7	7	5						
Telephone and telegraph	1,696	3	10	376	1,122	151	29	4	1				
Public utilities	8				7		1						
Stores	9,501	919	1,747	4,876	1,451	320	92	60	18	4	3	10	1
Yards (not otherwise classified)	3				2	1							
Domestic service	640	43	210	316	52	8	8	1	1	1			
Personal service	261	8	38	95	67	36	9	7	1				
Professional service	251	7	50	163	21	7	1	2					

Source: 24th Biennial Report of Industrial Commission of Minnesota

TABLE 63

WEEKLY EARNINGS OF MALE EMPLOYES SHORTLY BEFORE ADOPTION OF CODES UNDER THE NATIONAL INDUSTRIAL RECOVERY ACT IN STATE OF MINNESOTA

Shown by Industry and Number of Employes in Each Group

Classification of Industry	Total Number Employes	WEEKLY EARNINGS $1 to $6	$6 to $11	$11 to $16	$16 to $21	$21 to $26	$26 to $31	$31 to $36	$36 to $41	$41 to $46	$46 to $51	$51 to $101	$101 and Over
All industries	44,733	1,837	4,222	7,940	9,753	9,327	5,271	3,100	1,431	615	419	765	53
Stone products	649	6	21	151	140	116	80	36	33	8	21	35	2
Glass products	194	..	5	24	43	42	32	23	15	4	5	3	...
Metal products	1,471	52	110	254	382	342	165	92	36	15	9	13	1
Foundries	677	116	162	105	97	91	53	30	11	3	5	6	...
Machinery and instruments	2,297	122	201	316	535	560	241	120	67	44	30	59	2
Agricultural machinery and implements	34	...	2	3	10	3	8	.	8	...	...	...	...
Vehicles	103	3	24	58	8	4	1	3	...	1	1	...	...
Planing mills	406	9	29	84	124	71	47	18	11	7	3	3	...
Woodworking	2,034	78	311	523	489	372	125	62	39	14	10	11	...
Leather and fur	247	5	5	75	71	42	20	10	12	4	3	...	...
Boots and shoes	291	15	47	78	72	29	37	8	5	...	...	...	...
Rubber and composition goods	28	...	4	1	11	8	3	...	1	...	...	...	...
Chemicals and allied products	1,504	17	48	220	393	334	184	105	70	38	29	65	1
Paper and paper products	1,187	28	56	178	241	253	177	115	55	22	17	42	3
Printing and publishing	2,439	41	129	497	393	330	264	244	159	81	85	193	23
Textiles	2,310	174	1,010	895	189	30	10	.	1	...	...	1	...
Clothing and furnishings	3,153	426	967	1,109	408	181	45	9	3	1	2	2	...
Launderers, cleaners and dyers	1,138	12	59	191	322	272	146	60	32	30	8	6	...
Flour and grist mills	1,679	5	37	278	458	469	208	131	80	20	6	5	2
Bakeries	1,597	31	51	172	472	368	279	120	62	15	10	17	...
Dairy products	1,904	12	31	84	225	206	350	708	187	49	27	25	...
Slaughtering and meat packing	4,067	70	104	517	1,289	1,084	550	230	74	75	23	49	2
Brewing and bottling	1,380	26	27	56	84	531	350	125	85	28	25	38	4
Other food products	1,836	57	324	456	386	228	181	92	48	12	22	29	1
Miscellaneous manufacturing	167	1	21	36	38	42	13	5	7	2	...	2	..
Finishing, equipping and installing	170	7	16	45	39	25	10	7	10	4	1	5	1
Electric railways	2,589	43	40	131	605	789	815	137	24	3	1	...	1
Bus and truck lines	103	2	5	7	21	58	...	...	...	...	...	...	...
Garages	10	...	...	1	...	2	1	3	...	3	...	...	...
Cartage and storage	137	12	10	14	24	35	24	7	9	...	1	1	...
Telephone and telegraph	1,469	202	83	78	173	225	188	296	129	35	23	35	2
Public utilities	15	1	...	...	...	4	8	...	...	2	...	...	...
Stores	6,789	251	223	1,098	1,794	2,127	589	283	165	88	50	114	7
Yards (not otherwise classified)	52	...	..	4	3	6	43	3	3	...	...	...	...
Lumber yards	33	1	5	20	4	1	2	...	...	...	...	...	...
Domestic service	389	10	51	150	146	..	...	14	7	5	3	3	...
Personal service	67	2	4	7	9	22	12	2	3	1	2	2	1
Professional service	108	...	...	24	55	15	10	2	...	1	...	1	...

Source: 24th Biennial Report of Industrial Commission of Minnesota

OFFICE OF THE NATIONAL RECOVERY ADMINISTRATION

THE DIVISION OF REVIEW

THE WORK OF THE DIVISION OF REVIEW

Executive Order No. 7075, dated June 15, 1935, established the Division of Review of the National Recovery Administration. The pertinent part of the Executive Order reads thus:

> The Division of Review shall assemble, analyze, and report upon the statistical information and records of experience of the operations of the various trades and industries heretofore subject to codes of fair competition, shall study the effects of such codes upon trade, industrial and labor conditions in general, and other related matters, shall make available for the protection and promotion of the public interest an adequate review of the effects of the Administration of Title I of the National Industrial Recovery Act, and the principles and policies put into effect thereunder, and shall otherwise aid the President in carrying out his functions under the said Title. I hereby appoint Leon C. Marshall, Director of the Division of Review.

The study sections set up in the Division of Review covered these areas: industry studies, foreign trade studies, labor studies, trade practice studies, statistical studies, legal studies, administration studies, miscellaneous studies, and the writing of code histories. The materials which were produced by these sections are indicated below.

Except for the Code Histories, all items mentioned below are scheduled to be in mimeographed form by April 1, 1936.

THE CODE HISTORIES

The Code Histories are documented accounts of the formation and administration of the codes. They contain the definition of the industry and the principal products thereof; the classes of members in the industry; the history of code formation including an account of the sponsoring organizations, the conferences, negotiations and hearings which were held, and the activities in connection with obtaining approval of the code; the history of the administration of the code, covering the organization and operation of the code authority, the difficulties encountered in administration, the extent of compliance or non-compliance, and the general success or lack of success of the code; and an analysis of the operation of code provisions dealing with wages, hours, trade practices, and other provisions. These and other matters are canvassed not only in terms of the materials to be found in the files, but also in terms of the experiences of the deputies and others concerned with code formation and administration.

The Code Histories, (including histories of certain NRA units or agencies) are not mimeographed. They are to be turned over to the Department of Commerce in typewritten form. All told, approximately eight hundred and fifty (850) histories will be completed. This number includes all of the approved codes and some of the unapproved codes. (In Work Materials No. 18, Contents of Code Histories, will be found the outline which governed the preparation of Code Histories.)

(In the case of all approved codes and also in the case of some codes not carried to final approval, there are in NRA files further materials on industries. Particularly worthy of mention are the Volumes I, II and III which constitute the material officially submitted to the President in support of the recommendation for approval of each code. These volumes

set forth the origination of the codes, the sponsoring group, the evidence advanced to support the proposal, the report of the Division of Research and Planning on the industry, the recommendations of the various Advisory Boards, certain types of official correspondence, the transcript of the formal hearing, and other pertinent matter. There is also much official information relating to amendments, interpretations, exemptions, and other rulings. The materials mentioned in this paragraph were of course not a part of the work of the Division of Review.)

THE WORK MATERIALS SERIES

In the work of the Division of Review a considerable number of studies and compilations of data (other than those noted below in the Evidence Studies Series and the Statistical Material Series) have been made. These are listed below, grouped according to the character of the material. (In Work Materials No. 17, Tentative Outlines and Summaries of Studies in Process, the materials are fully described).

Industry Studies

Automobile Industry, An Economic Survey of
Bituminous Coal Industry under Free Competition and Code Regulation, Economic Survey of
Electrical Manufacturing Industry, The
Fertilizer Industry, The
Fishery Industry and the Fishery Codes
Fishermen and Fishing Craft, Earnings of
Foreign Trade under the National Industrial Recovery Act
  Part A - Competitive Position of the United States in International Trade 1927-29 through 1934.
  Part B - Section 3 (e) of NIRA and its administration.
  Part C - Imports and Importing under NRA Codes.
  Part D - Exports and Exporting under NRA Codes.
Forest Products Industries, Foreign Trade Study of the
Iron and Steel Industry, The
Knitting Industries, The
Leather and Shoe Industries, The
Lumber and Timber Products Industry, Economic Problems of the
Men's Clothing Industry, The
Millinery Industry, The
Motion Picture Industry, The
Migration of Industry, The: The Shift of Twenty-Five Needle Trades From New York State, 1926 to 1934
National Labor Income by Months, 1929-35
Paper Industry, The
Production, Prices, Employment and Payrolls in Industry, Agriculture and Railway Transportation, January 1923, to date
Retail Trades Study, The
Rubber Industry Study, The
Textile Industry in the United Kingdom, France, Germany, Italy, and Japan
Textile Yarns and Fabrics
Tobacco Industry, The
Wholesale Trades Study, The
Women's Neckwear and Scarf Industry, Financial and Labor Data on

Women's Apparel Industry, Some Aspects of the

Trade Practice Studies

Commodities, Information Concerning: A Study of NRA and Related Experiences in Control
Distribution, Manufacturers' Control of: Trade Practice Provisions in Selected NRA Codes
Distributive Relations in the Asbestos Industry
Design Piracy: The Problem and Its Treatment Under NRA Codes
Electrical Mfg. Industry: Price Filing Study
Fertilizer Industry: Price Filing Study
Geographical Price Relations Under Codes of Fair Competition, Control of
Minimum Price Regulation Under Codes of Fair Competition
Multiple Basing Point System in the Lime Industry: Operation of the
Price Control in the Coffee Industry
Price Filing Under NRA Codes
Production Control in the Ice Industry
Production Control, Case Studies in
Resale Price Maintenance Legislation in the United States
Retail Price Cutting, Restriction of, with special Emphasis on The Drug Industry.
Trade Practice Rules of The Federal Trade Commission (1914-1936): A classification for comparision with Trade Practice Provisions of NRA Codes.

Labor Studies

Cap and Cloth Hat Industry, Commission Report on Wage Differentials in
Earnings in Selected Manufacturing Industries, by States, 1933-35
Employment, Payrolls, Hours, and Wages in 115 Selected Code Industries 1933-35
Fur Manufacturing, Commission Report on Wages and Hours in
Hours and Wages in American Industry
Labor Program Under the National Industrial Recovery Act, The
  Part A. Introduction
  Part B. Control of Hours and Reemployment
  Part C. Control of Wages
  Part D. Control of Other Conditions of Employment
  Part E. Section 7(a) of the Recovery Act
Materials in the Field of Industrial Relations
PRA Census of Employment, June, October, 1933
Puerto Rico Needlework, Homeworkers Survey

Administrative Studies

Administrative and Legal Aspects of Stays, Exemptions and Exceptions, Code Amendments, Conditional Orders of Approval
Administrative Interpretations of NRA Codes
Administrative Law and Procedure under the NIRA
Agreements Under Sections 4(a) and 7(b) of the NIRA
Approved Codes in Industry Groups, Classification of
Basic Code, the -- (Administrative Order X-61)
Code Authorities and Their part in the Administration of the NIRA
  Part A. Introduction
  Part B. Nature, Composition and Organization of Code Authorities

Part C. Activities of the Code Authorities
Part D. Code Authority Finances
Part E. Summary and Evaluation
Code Compliance Activities of the NRA
Code Making Program of the NRA in the Territories, The
Code Provisions and Related Subjects, Policy Statements Concerning
Content of NIRA Administrative Legislation
Part A. Executive and Administrative Orders
Part B. Labor Provisions in the Codes
Part C. Trade Practice Provisions in the Codes
Part D. Administrative Provisions in the Codes
Part E. Agreements under Sections 4(a) and 7(b)
Part F. A Type Case: The Cotton Textile Code
Labels Under NRA, A Study of
Model Code and Model Provisions for Codes, Development of
National Recovery Administration, The: A Review of its Organization and Activities
NRA Insignia
President's Reemployment Agreement, The
President's Reemployment Agreement, Substitutions in Connection with the
Prison Labor Problem under NRA and the Prison Compact, The
Problems of Administration in the Overlapping of Code Definitions of Industries and Trades. Multiple Code Coverage, Classifying Individual Members of Industries and Trades
Relationship of NRA to Government Contracts and Contracts Involving the Use of Government Funds
Relationship of NRA with States and Municipalities
Sheltered Workshops Under NRA
Uncodified Industries: A Study of Factors Limiting the Code Making Program

Legal Studies

Anti-Trust Laws and Unfair Competition
Collective Bargaining Agreements, the Right of Individual Employees to Enforce
Commerce Clause, Federal Regulation of the Employer-Employee Relationship Under the
Delegation of Power, Certain Phases of the Principle of, with Reference to Federal Industrial Regulatory Legislation
Enforcement, Extra-Judicial Methods of
Federal Regulation through the Joint Employment of the Power of Taxation and the Spending Power
Government Contract Provisions as a Means of Establishing Proper Economic Standards, Legal Memorandum on Possibility of
Industrial Relations in Australia, Regulation of
Intrastate Activities Which so Affect Interstate Commerce as to Bring them Under the Commerce Clause, Cases on
Legislative Possibilities of the State Constitutions
Post Office and Post Road Power -- Can it be Used as a Means of Federal Industrial Regulation?
State Recovery Legislation in Aid of Federal Recovery Legislation History and Analysis
Tariff Rates to Secure Proper Standards of Wages and Hours, the Possibility of Variation in
Trade Practices and the Anti-Trust Laws
Treaty Making Power of the United States
War Power, Can it be Used as a Means of Federal Regulation of Child Labor?

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THE EVIDENCE STUDIES SERIES

The Evidence Studies were originally undertaken to gather material for pending court cases. After the Schechter decision the project was continued in order to assemble data for use in connection with the studies of the Division of Review. The data are particularly concerned with the nature, size and operations of the industry; and with the relation of the industry to interstate commerce. The industries covered by the Evidence Studies account for more than one-half of the total number of workers under codes. The list of those studies follows:

Automobile Manufacturing Industry
Automotive Parts and Equipment Industry
Baking Industry
Boot and Shoe Manufacturing Industry
Bottled Soft Drink Industry
Builders' Supplies Industry
Canning Industry
Chemical Manufacturing Industry
Cigar Manufacturing Industry
Coat and Suit Industry
Construction Industry
Cotton Garment Industry
Dress Manufacturing Industry
Electrical Contracting Industry
Electrical Manufacturing Industry
Fabricated Metal Products Mfg. and Metal Finishing and Metal Coating Industry
Fishery Industry
Furniture Manufacturing Industry
General Contractors Industry
Graphic Arts Industry
Gray Iron Foundry Industry
Hosiery Industry
Infant's and Children's Wear Industry
Iron and Steel Industry
Leather Industry
Lumber and Timber Products Industry
Mason Contractors Industry
Men's Clothing Industry
Motion Picture Industry
Motor Vehicle Retailing Trade
Needlework Industry of Puerto Rico
Painting and Paperhanging Industry
Photo Engraving Industry
Plumbing Contracting Industry
Retail Lumber Industry
Retail Trade Industry
Retail Tire and Battery Trade Industry
Rubber Manufacturing Industry
Rubber Tire Manufacturing Industry
Shipbuilding Industry
Silk Textile Industry
Structural Clay Products Industry
Throwing Industry
Trucking Industry
Waste Materials Industry
Wholesale and Retail Food Industry
Wholesale Fresh Fruit and Vegetable Industry
Wool Textile Industry

THE STATISTICAL MATERIALS SERIES

This series is supplementary to the Evidence Studies Series. The reports include data on establishments, firms, employment, payrolls, wages, hours, production capacities, shipments, sales, consumption, stocks, prices, material costs, failures, exports and imports. They also include notes on the principal qualifications that should be observed in using the data, the technical methods employed, and the applicability of the material to the study of the industries concerned. The following numbers appear in the series:
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Asphalt Shingle and Roofing Industry
Business Furniture
Candy Manufacturing Industry
Carpet and Rug Industry
Cement Industry
Cleaning and Dyeing Trade
Coffee Industry
Copper and Brass Mill Products Industry
Cotton Textile Industry
Electrical Manufacturing Industry
Fertilizer Industry
Funeral Supply Industry
Glass Container Industry
Ice Manufacturing Industry
Knitted Outerwear Industry
Paint, Varnish, and Lacquer, Mfg. Industry
Plumbing Fixtures Industry
Rayon and Synthetic Yarn Producing Industry
Salt Producing Industry

THE COVERAGE

The original, and approved, plan of the Division of Review contemplated resources sufficient (a) to prepare some 1200 histories of codes and NRA units or agencies, (b) to consolidate and index the NRA files containing some 40,000,000 pieces, (c) to engage in extensive field work, (d) to secure much aid from established statistical agencies of government, (e) to assemble a considerable number of experts in various fields, (f) to conduct approximately 25% more studies than are listed above, and (g) to prepare a comprehensive summary report.

Because of reductions made in personnel and in use of outside experts, limitation of access to field work and research agencies, and lack of jurisdiction over files, the projected plan was necessarily curtailed. The most serious curtailments were the omission of the comprehensive summary report; the dropping of certain studies and the reduction in the coverage of other studies; and the abandonment of the consolidation and indexing of the files. Fortunately, there is reason to hope that the files may yet be cared for under other auspices.

Notwithstanding these limitations, if the files are ultimately consolidated and indexed the exploration of the NRA materials will have been sufficient to make them accessible and highly useful. They constitute the largest and richest single body of information concerning the problems and operations of industry ever assembled in any nation.

L. C. Marshall,
Director, Division of Review.

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